

# AMERICAN BEE JOURNAL

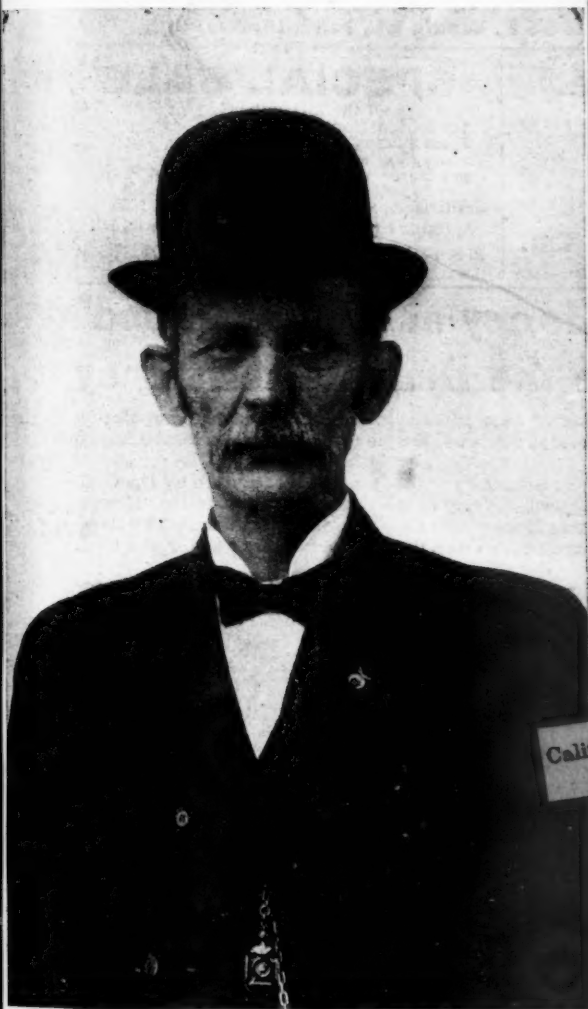
Volume LI.

No. 9.

## The Late Geo. E. Hilton

On July 12, 1911, there passed from earth one of the kindest of men, and also one of the most prominent bee-keepers of this country. Geo. E. Hilton was favorably known not only in beedom, but also as a valued citizen and member of society in the State of Michigan.

Mr. Hilton was born in 1847, at Leighton, Bedford County, England, and came to this country with his mother when he was but 5 years old, in the fall of 1851.



Calif State Library deo11  
Sacramento, Calif

The family located near Cleveland, Ohio, where they remained for 5 years, and then moved to Hillsdale County, Mich., where they lived until 1894, when Mr. Hilton went to Fremont, which was his home ever since, excepting for 2 years that he passed in the Ozark Mountains of the South.

Mr. Hilton held many important positions in civic and religious life, among them being for two terms a member of the Michigan Legislature, and for many

years superintendent of the Congregational Sunday-school where he lived. For 13 years he held the office of post-master at Fremont. In 1909 he was president of the National Bee-Keepers' Association, and presided at the meeting in Sioux City, Iowa.

For many years Mr. Hilton was a leading bee-keeper of his State, having as high as 250 colonies of bees, from which he averaged, for 8 years, 75 pounds of honey per colony. Latterly he kept about 100 colonies, and also conducted a bee-supply business.

It will be seen from the foregoing that Mr. Hilton was a very busy man, interested in many lines of work, and always successful. He was a man of good judgment, fearless for the right, and interested in everything that was for the advancement and up-building of the community, as well as everything that tended to the betterment of humanity everywhere.

Mr. Hilton had been sick since last January, with cancer of the stomach, his condition growing very rapidly serious until within about a month before his death, when hope of his recovery was abandoned.

He came to Chicago July 10, 1911, to consult a specialist in one of the most noted hospitals, but after examination and consultation, it was decided that it would be useless to perform an operation, as his trouble was too far advanced. He returned to Fremont the evening of July 11th, and passed away the afternoon of the next day, only a few hours after his arrival.

Mr. Hilton was united in marriage to Elizabeth Copeland, 27 years ago. They had 4 children—Huber, Gladys, Stockbridge, and Marjorie—who, with Mrs. Hilton, remain to mourn the departure of a loving and faithful father and husband.

It was our privilege to spend about 2 hours with Mr. Hilton in the hospital here in Chicago, and also some time on the boat previous to his crossing Lake Michigan for his home. He realized that he could not live, and spoke hopefully of the future Home.

Thus, one by one are our prominent bee-keepers and other friends leaving this earth. Only about 6 weeks previous to Mr. Hilton's death, Mr. Hutchinson passed away. In so brief a time were two of Michigan's noted bee-keepers removed from the field of action. But the influence of their lives will remain to encourage those who are still in the ranks, and also those others who will come into the field of bee-keeping for many years in the future. It is not easy to estimate the debt that the present status of apiculture owes to such men as Mr. Hutchinson, Mr. Hilton, and others who have gone on before. The results of their efforts to uplift and advance the interests of bee-keepers will remain, though they themselves pass on to higher realms. They will be missed in the gatherings of bee-keepers, both State and National. For something like a third of a century their help and influence have been felt among their fellows. And those of us who remain to continue apiarian work can but resolve to profit by the teachings and efforts which they invested in the field of bee-keeping.

SEPTEMBER  
1911

# American Bee Journal



PUBLISHED MONTHLY BY  
**GEORGE W. YORK & COMPANY**  
117 N. Jefferson Street, Chicago, Ill.

## IMPORTANT NOTICE

THE SUBSCRIPTION PRICE of this Journal is \$1.00 a year, in the United States of America (except in Chicago, where it is \$1.25), and Mexico; in Canada, \$1.10; and in all other countries in the Postal Union, 25 cents a year extra for postage. Sample copy free.

THE WRAPPER-LABEL DATE indicates the end of the month to which your subscription is paid. For instance, "dec 11" on your label shows that it is paid to the end of December, 1911.

SUBSCRIPTION RECEIPTS.—We do not send a receipt for money sent us to pay subscription, but change the date on your address-label, which shows that the money has been received and credited.

## Advertising Rate, Per Agate Line, 15c.

14 lines make one inch.

Nothing less than 4 lines accepted.

### DISCOUNTS:

3 times 14c a line      9 times 11c a line  
6 " 12c                      12 " (1 yr.) 10c a line

Reading Notices, 25 cents, count line.  
Goes to press the 6th of each month.

## National Bee-Keepers' Association.

(Organized in 1870.)

### Objects.

1. To promote the interests of bee-keepers.
2. To protect and defend its members in their lawful rights as to keeping bees.
3. To enforce laws against the adulteration of honey.

### Membership Dues.

One dollar a year.

### Officers and Executive Committee.

President—GEORGE W. YORK, Chicago, Ill.  
Vice-President—W. D. WRIGHT, Altamont, N. Y.

Secretary—E. B. TYRRELL, 230 Woodland Ave., Detroit, Mich.  
Treas. and Gen. Mgr.—N. E. FRANCE, Platteville, Wis.

### Twelve Directors.

Jas. A. Stone, Rt. 4, Springfield, Ill.  
O. L. Hershiser, Kenmore, N. Y.  
H. A. Surface, Harrisburg, Pa.  
Wm. McEvoy, Woodburn, Ont., Canada.  
M. H. Mendleson, Ventura, Calif.  
R. C. Aikin, Loveland, Colo.  
R. L. Taylor, Lapeer, Mich.  
E. D. Townsend, Remus, Mich.  
W. H. Laws, Beeville, Tex.  
J. E. Crane, Middlebury, Vt.  
E. F. Atwater, Meridian, Idaho.  
R. A. Morgan, Vermilion, S. Dak.

Are you a member? If not, why not send the annual dues of \$1.00 at once to Treas. France, or to the office of the American Bee Journal, 117 N. Jefferson St., Chicago, Ill.? It will be forwarded promptly to the Treasurer, and a receipt mailed to you by him. Every progressive bee-keeper should be a member of this, the greatest bee-keepers' organization in America.



## Queens That "Are Better"—Italians & Banats

Untested, 75c each; \$8.00 per doz. Tested, \$1.25 each; \$12 per doz.  
Select Breeders from Full Colonies, \$3.00 each.

Wholesale price of Queens—5 dozen or more in one order, deduct 50c per dozen.

After July 1st I am going to make a special introductory price for Breeder Queens that were reared early in spring, and have served me in building up populous colonies, and thereby having fully demonstrated their value. One colony of my Banats has given this season 212 pounds of surplus bulk and extracted honey. Some of my Italians were as populous, and might have given as much surplus had they been in as good location. Breeder Queens, \$3.00 each; one dozen or more in one order, deduct 25c each.

One-frame Nuclei, with Untested Queen, \$2.00 each; 2-fr., \$3.00; 3-fr., \$4.00. Full colonies, 10-fr., \$7.00. Add 50c if Tested Queens are wanted; add \$2.00 each if Breeder Queens are wanted.

Twenty or more Colonies or Nuclei in one order, deduct 25c each.

I have six different yards several miles apart, and am prepared to fill orders promptly. I solicit your trade and guarantee you satisfaction.

**J. A. Simmons, Uvalde Co. Apiaries, Sabinal, Tex.**

## Lewis Beeware, Bingham Smokers Dadant's Foundation.

Are Any Supplies Needed by the Bee-Keeper?

**BEEWAX WANTED. CATALOG FREE.**

Leather-Colored and Golden Untested Italian Queens, \$1.00.

The C. M. SCOTT CO., 1004 E. Wash. St., Indianapolis, Ind.



## Bees For Sale.

I have a few lots of Bees offered to me to sell, scattered in South Georgia and Middle Florida. The most of them are well located; others can be moved a short distance in good locations. The most of the bees are in modern hives, and some good bargains in the lot. 8Atf

**J. J. Wilder, Cordele, Ga.**

Please mention Am. Bee Journal when writing.

## SPECIAL SALE

Of the following Goods:

30,000 Ideal Sections.  
45,000 4 1/4 x 1 1/2-16, 4 1/4 x 2, 4 1/4 x 1 3/4.  
20,000 4 1/4 x 1 1/2, 4-beeways.  
30 8-frame Wis. Supers. 100 Plain Supers.  
All in first-class condition.  
Send List of Goods wanted for Best Price.  
Catalog Free. **H. S. Doby, St. Anne, Ill.**

P. S.—We handle the Best of ROOFING at the Lowest Price.

## 50,000 Copies "Honey as a Health-Food" To Help Increase the Demand for Honey

We have had printed an edition of over 50,000 copies of the 16-page pamphlet on "Honey as a Health-Food." It is envelope size, and just the thing to create a local demand for honey.

The first part of it contains a short article on "Honey as Food," written by Dr. C. C. Miller. It tells where to keep honey, how to liquefy it, etc. The last is devoted to "Honey Cooking Recipes" and "Remedies Using Honey." It should be widely circulated by those selling honey. The more the people are educated on the value and uses of honey as a food, the more honey they will buy.

Prices, prepaid—Sample copy for a 2-cent stamp; 50 copies for 90 cents; 100 copies for \$1.50; 250 copies for \$3.00; 500 for \$5.00; or 1000 for \$9.00. Your business card printed free at the bottom of front page on all orders for 100 or more copies.

Address all orders to

**GEORGE W. YORK & CO.,**

**Chicago, Ill.**

## — Wanted — Comb and Extracted Honey

Let us hear from you with your best price on your Comb and Extracted Honey, freight paid to Cincinnati. We buy every time price justifies. No lot too large or too small. We remit day shipment arrives.

**The FRED W. MUTH CO.**

"THE BUSY BEE-MEN"

**51 Walnut Street,**

**CINCINNATI, OHIO**





## REQUEENING with Standard-Bred Italian Queens.

The demand for our Fine Standard-Bred Untested Italian Queen is increasing rapidly, because **they give satisfaction.** Here is what two of many pleased customers have to say;

GEORGE W. YORK & CO.—

I must tell you how well pleased I am with the Queen you sent me last year. I thought I had some pretty good Queens myself, but the one you sent me is the best Queen I have now. You know we have had, and are still having, a severe drouth. White clover lasted only two weeks, and while my average of honey per colony is about 40 pounds of surplus, the bees from the Queen you sent me have gathered, so far, more than 100 pounds of fine honey. They are hustlers, indeed, and the bees are very gentle. **Twenty dollars would not buy that Queen.** After this I know where I will get my Queens.

G. A. BARBISCH.

Houston Co., Minn., July 14, 1910.

GEORGE W. YORK & CO.—

I have had a good many Queens from you in the past, and have never gotten a poor one.

(REV.) MILTON MAHIN.

New Castle, Ind., July 18, 1910.

We could publish many more testimonials like the above, but what would be the use? As "the proof of the pudding is in the eating" thereof, so the proof of the value of our good Queens is in getting and trying them yourself. Send in your order at once and see the nice, vigorous Queens you will get. Some of the largest honey-producers in this country use our Queens. They know what they want, and where to get it. That is the reason they order our Queens.

If you have not had any of our Standard-Bred Queens, why not get one of them **now** with a renewal of your subscription to the American Bee Journal? No matter if your subscription is now paid in advance, we will credit it still another year, and also send you the Queen. **Prices after July 15th:**

We mail one Queen with the Bee Journal for a year—both for only \$1.50. Queen alone is 75 cents; 3 for \$2.10; 6 for \$4.00; 12 for \$7.50. These prices are exceedingly low in view of the excellence of the Queens. It pays to get **good stock.** Mr. Barbisch as well as thousands of others have proven this.

Now is the time to requeen your colonies. Why not order some of our good Queens?

We are now sending Queens **almost by return mail**, and expect to continue to do this until the end of the season. Address all orders to—

**GEORGE W. YORK & CO.,**

117 N. Jefferson St., Chicago, Ills.



## BARNES' Foot-Power Machinery



Read what J. L. PARENT, of Charlton, N. Y., says: "We cut with one of your Combined Machines, last winter, 50 chaff hives with 7-in. cap, 100 honey-racks, 500 brood-frames, 2,000 honey-boxes, and a great deal of other work. This winter we have double the amount of bee-hives, etc., to make, and we expect to do it with this Saw. It will do all you say it will." Catalog and price-list free.

Address, W. F. & JOHN BARNES, 905 Ruby St., Rockford, Ill.

Please mention Am. Bee Journal when writing.

## M. H. HUNT & SON

The best time to buy your goods is during the fall and winter months. We are making **Liberal Discounts for Early Orders**, and would like to quote you **net prices** on your needs for next season.

—BEESWAX WANTED—

**LANSING, - MICHIGAN.**

Please mention Am. Bee Journal when writing.

## Bee-Keepers

Here is a bargain in No. 2

4 1/4 x 4 1/4 **1-Piece 2-Bee-way Sections**  
\$3.25 per 1000. Plain, 25c less.

Send your order to-day. Also write for Catalog.

**AUG. LOTZ & CO.,**

BOYD, WIS.

Please mention Am. Bee Journal when writing.

"Griggs Saves You FREIGHT"

## TOLEDO

Is the place to buy your **BEE-WARE** when your crop is off. Don't make the mistake of putting it up in cheap, shoddy Cases.

### Root's Extra-Polished Cases

Are the cheapest in the long run. Your Honey looks better, and brings the highest price. We carry a large stock of these Cases—all sizes—and can ship promptly.

### HONEY, HONEY, HONEY!

We handle large quantities, both Comb and Extracted. Mail small sample of Extracted, and state how Comb is put up, size of sections used, etc. Full particulars by return mail.

**BEESWAX** always wanted—cash or in trade.

**S. J. Griggs & Co.,**

24 North Erie St.,

**TOLEDO, - OHIO.**

Successors to Griggs Bros. Co.

"GRIGGS THE KING-BEE."

Please mention Am. Bee Journal when writing.

### SUPERIOR BEE-SUPPLIES

Specially made for Western bee-keepers by G. B. Lewis Co. Sold by

Colorado Honey-Producers' Association,  
DENVER, COLO.

Please mention Am. Bee Journal when writing.

# You are particular?

about the quality and workmanship of the bee-goods you buy—you have a right to be.

Years ago, when bee-supply industries were at the "Carpenter Shop" stage, you were obliged to take what you could get—Hives poorly made and roughly finished—Sections that were made incorrectly, fit wrong, and gave you trouble.

Now things are different—nowadays bee-supplies are manufactured scientifically right at the new five-acre plant of the G. B. Lewis Company.

**Lewis Beeware** is the result of thirty-five years of bee-supply experience. The Head Mechanic has been with this organization thirty-five years; the Superintendent of bee-hives twenty-nine years; Superintendent of sections twenty-eight years. All these years these men have been studying methods, material, machinery, and the peculiar demand of the bee-keeping public.

## Does all this mean anything to you?

**The Answer is simply this: Buy LEWIS BEEWARE. Insist on LEWIS BEEWARE.**

The Beeware Brand is a guarantee of success insurance in bee-keeping. Don't be satisfied at this day and age with any other make of bee-supplies.

It is sold by over thirty distributing houses in the United States and foreign countries. Ask for the name of the nearest one.

**G. B. Lewis Co.,** Manufacturers of Beeware **Watertown, Wis., U. S. A.**

**It Pays WELL to Use Foundation.**

**It Pays BETTER to Use**

## **DADANT'S FOUNDATION**

IT HAS BEEN PROVEN

**Best by Test**

By Many Leading Bee-Keepers. We have AGENTS near you.

**Why Use Any Other Make?**

Drop us a line and we will tell you where you can get Goods near you, and save you Time and Freight.

## **Bee-Supplies of All Kinds**

**DADANT & SONS,**  
**HAMILTON, ILLS.**





(Entered as second-class matter July 30, 1907, at the Post-Office at Chicago, Ill., under Act of March 3, 1879.)

Published Monthly at \$1.00 a Year, by George W. York & Company, 117 North Jefferson Street,

GEORGE W. YORK, Editor.  
DR. C. C. MILLER, Associate Editor.

CHICAGO, ILL., SEPTEMBER, 1911

Vol. LI---No. 9

## EDITORIAL COMMENTS

### European Foul Brood in 1911

In the season of 1911, European foul brood showed itself in 41 colonies of my 116. I have no means of knowing how many cases were a home product, and how many were from diseased colonies around me. There were no very bad cases. In most of them there were only a few bad cells—perhaps only a cell or two. In the worst case there was probably not 10 percent of the brood affected.

All colonies were very strong, and I expected the disease to disappear in those colonies that were least affected. But it did not do so, except in one case. Perhaps that was because of the very severe dearth, as the summer of 1911 was one of the worst for drouth and dearth of honey that I ever experienced. In spite of that the colonies were very strong, so that I had no anxiety about doubling or strengthening, for a very important part of the treatment for European foul brood is to make very strong each colony to be treated. No use to try to do anything with a poor, little, discouraged colony.

The queens did not appear affected as in previous years. That was probably because the cases were not very bad. In a bad case the queen appears sluggish, and not worth saving. Likely she is not really diseased by the foul-brood microbe, but living in such surroundings her general health suffers. At any rate, it did not seem necessary to replace the queens, and so, with few exceptions the queens were caged and left with the colony, generally with the cage stuck in the entrance. In a week to 12 days—generally in 10 days—the queen was released, and 10 days later the colony was found to be "clean."

There were, however, 5 cases in which the disease returned after treatment, but appearing all right after second treatment.

With my present knowledge of European foul brood, I would in all mild

cases repeat the same treatment wherever a good, vigorous queen was present—that is, cage the queen for about 10 days and then free her. In more severe cases I would destroy the queen, and at the same time give a ripe queen-cell or a virgin just hatched. Or, give a young laying queen after 10 days of queenlessness. And in general the young queen given should be of pure Italian stock, as being more vigorous than common stock.

Let it be clearly understood, however, that this refers only to the European variety of foul brood. For American foul brood it will not prove effective.

C. C. M.

### Prevention of Robbing Among Bees

To stop a case of robbing when well under way is not an easy thing. Any fool can start it. It may not be necessary to give a full set of rules for starting robbing, but it may be well to name a few of the things that are likely to prove successful. Then the beginner will know what to avoid.

To make a sure thing of starting robbing, better take it at a time when no nectar is to be had in the field. When bees have all they can do in the field and more to, it sometimes takes something of a genius to start them at robbing. At the close of the harvest is a good time. Even in the midst of the harvest, if because of rain or for any other reason the bees stop gathering, they are always in the humor for robbing.

Leave a frame of brood or honey standing outside for a time, and it may start a case of robbing at the other end of the yard. A robber—and at such a time any bee may be a robber—gets a load of honey from the exposed comb, takes it home, and the word seems to be passed around that honey is to be had, and then others start out. In some way other colonies are aroused; pos-

sibly the noise of the robbers attracts the bees of other colonies. At any rate in a little while there is excitement all over the apiary, and bees will be seen trying to crowd into cracks about the hives where there is no possibility of their entering.

At a time when bees are inclined to rob, any change in the appearance of hives seems to attract the attention of the bees. An opening at the back of the hive may not attract the least attention if it has been there all summer, but let it be made afresh and the robbers at once consider it a proper subject for investigation. If a beginner should do such an unwise thing as to start a nucleus in a time of scarcity, an attack is likely to be made upon it. It seems to be a little like the new boy at school, who seems to be a target for all until he settles down in his proper place.

In a time of scarcity, when a hive is opened, if robbers appear upon the scene, darting at the combs as they are lifted out, let the operator go right on, opening hive after hive with no precaution whatever, and he may surely count on developing a case of robbing that may end only with the destruction of one or more colonies.

The wise bee-keeper, however, will look out for the beginnings, scrupulously avoiding all exposure of honey. If work must be done at the hives, he may keep the hive as much as possible covered with a cloth, perhaps slightly saturated with carbolic acid, preferring to work late in the day, so that darkness may close any incipient tendency to robbing.

### Safe Introduction of Queens

There is one way of introducing queens that is absolutely safe. Take two or more frames of brood and put them in an upper story over a strong colony, with an excluder to prevent the queen going up. In about 8 days all the brood will be sealed, and if the brood has been of all ages some of it will be hatching out. The ideal thing would be to have all the brood sealed 5 days before putting up the brood. Of course, it is impossible to have all the brood in that condition, but the nearer it comes to it the better. At the end of

# American Bee Journal

the 8 days take off the upper story, and in place of the excluder put on a piece of wire-cloth that will allow no bee to pass up, and over this put an empty hive-body, into which you will put the frames of brood, brushing off the bees in front of the hive. Be sure that not a bee is left in the upper story. Now put in your queen and cover up, bee-tight. The young bees that hatch out, knowing no other mother, will of course be kind to the queen. In 5 days put the nucleus on a new stand, with an entrance large enough for only one bee to pass at a time, so that robber-bees will not attack it. Of course it can be strengthened up into a full colony by sealed brood from other colonies.

Ordinarily this will be considered too much trouble for any but a very valuable queen, and it will be considered better to take less trouble and run the risk of losing a queen now and then. But there is a way that is less troublesome that very much reduces the danger of loss in introducing:

Remove to a new stand the hive into which the queen is to be introduced, destroy the old queen, and take from the hive 2 or 3 frames of brood with adhering bees. These you will put into an empty hive on the old stand. Now introduce your new queen into the old hive in the usual way. After she has begun laying, put the hive back on its old stand, returning to it the 2 or 3 frames of brood that had been taken away, destroying any queen-cells that may have been started on them. The secret of the greater success lies in the fact that when the hive is moved to a new stand all the field-bees return to the old stand, and the queen is introduced to a colony of younger bees, and it is the older bees that are likely to be hostile to a new queen.

When the hive is returned from its new stand to the old place, there will be some field-bees that will return from the field to the new stand, but these will be kindly received in the near-by hives. You can, however, avoid losing any bees from the colony. Instead of putting the hive on a new stand, put it on top of the other hive, or on top of the supers, if there be any supers. Then no bees will go to any other hive.

## The Cotton Controllable Hive

O. B. Griffin has sent the following, clipped from a reputable agricultural paper:

*Every family, that has a spot of land, can keep Honey Bees and raise Honey for family use or for Market. One hundred dollars income from one Controllable Hive of Bees in one year. Lots of Honey and Lots of Money, keeping Bees in Controllable Hives. No stings. No loss in winter or swarming time. Something new in Bee Management. For particulars, write C. B. Cotton, —, Maine.*

Older readers will recognize an acquaintance of a good many years ago, although at that time it was Mrs. Lizzie E. Cotton. So the "Something new in Bee-Management" is not so very new, dating back some 30 years.

But why not elaborate a little on that "One hundred dollars income from one Controllable Hive of Bees in one year?" Suppose a man has 100 colonies. If the income from each is \$100, he will have \$10,000 in a year. But a

good many bee-keepers have 500 colonies each, or more. With 500 colonies the income would be more than enough to keep the average bee-keeper the rest of his days. "There's millions in it!"

Note that no stings and no loss in winter or swarming time. To make the thing complete it should be added that no pasture is needed—just put the bees in a Controllable Hive and the hundred dollars a year from each hive is sure, even if there is not a blossom within 100 miles.

The very strange thing in the case is that practical bee-keepers go on year after year without taking advantage of this wonderful hive! If a single practical bee-keeper with as many as 50 or 100 colonies uses this wonderful hive, nothing has been said about it in the bee-papers, and bee-keepers do not generally fail to make known their successes.

Why is it that this hive is not advertised in the bee-papers, which are read by the very men who buy most of the bee-hives that are used? Probably for two reasons. The first is that bee-keepers know better than to be fooled by such an advertisement, and the second is, that no bee-paper could be induced to accept such an advertisement, unless to give it a free insertion as in the present case. That a reputable agricultural paper should accept it seems almost beyond belief, for as a rule such papers are conducted by men that are both honest and intelligent.

## A Mistake of Beginners—Robber-Bees

It is only natural that beginners should make mistakes, but there is one mistake that is likely to bring such serious results that the beginner should be specially warned against it. It is the mistake of thinking that when robbing has gotten under way it can be at once stopped by removing the object of attack.

Carelessly, a beginner has left a section of honey standing on a hive, and when he next sees it he finds little left but the remains of the comb. At once he takes that away. The returning robbers not finding it where they had left it, go to searching in the neighborhood, and a fierce onslaught may be made on the nearest colony. If he had left the mutilated section where it was, the bees would have cleaned all the honey out of it, hunted over the spot for a time, and then concluding they had gotten all that was to be had they would have quietly left. If a section, or a comb of honey, thus exposed, be discovered when only a little of the honey has been taken by the robbers, it may be safely taken away if in its place a scrap of comb containing a little honey be left.

If robber-bees have made an attack upon a nucleus or a colony, the beginner thinks he can make a sure thing of saving it by carrying it down cellar. How can the robbers possibly get at it there? But wait. When the robbers find only a vacant space where the hive stood, they perhaps think the hive has been moved to one side or the other; at any rate, an attack is pretty sure to be made upon one of the neighboring hives, and if that be carried down cel-

lar it only means attack upon another colony, and the robbers can shift their point of attack just as often as new hives are cellared. Even if neighboring colonies should successfully resist attack, when the hive is returned to its place from the cellar the robbers are pretty sure to attack it with fresh vigor.

The thing to do, when the hive is taken into the cellar, is to set in its place a hive containing perhaps an old comb with a little honey in it. The bees will clean this out, and after thoroughly satisfying themselves the booty is all gone, they will leave it, and the next day the removed colony may be returned to its place. Possibly it may be just as well to have the decoy hive entirely empty, only so it looks as much as possible like the removed hive.

## Queen-Mating Stations

The following letter has been received at this office:

The undersigned wishes to call attention to article in the June-July Review, headed, "Mating Stations," and would suggest that it might be brought up at the next National convention. In the event of a successful launching of such a proposition, we stand ready to lend our aid. Of course, we can hear some say, "We don't need it," that they can secure purity of mating in their own yards, etc., but we are under the impression that it would have a tendency eventually to abolish the poor grade of queens, and give us all a higher standard. Irvington, N. J. SAWYER & HEDDEN.

The passage referred to is in an article by F. L. Pollock, and is as follows:

In Switzerland experiment stations are maintained where virgin queens can be mated to be fertilized in an apiary of select drones. It would seem that the United States is rich enough to provide some such stations, and a request by the National Association might secure it.

If not, surely a number of members of the Association might be found who would take sufficient interest in the matter to subscribe a small sum each, and establish a mating station on some isolated point, where a small apiary could be kept consisting of colonies bred from queens that showed not less than 150-pound record. Two or 3 years of selective breeding in such a yard should work wonders.

This surely is a matter of vast importance, and the suggestion that it be brought up for consideration, and perhaps for action, at the next National convention is very sane. The one thing that more than anything else stands in the way of permanent improvement in bees is the fact that male parentage can not be controlled, but must be left to chance. A bee-keeper may buy the best queen in the world, rear young queens from her, and those young queens, for anything that he can do, may mate with scrub drones from some surrounding apiary. Look at the frantic efforts that have been made to control mating by erecting huge tents, or otherwise. No small amount of money has been spent in this way, and more would be cheerfully spent if success could be made certain.

When one comes to think about it, it does seem that bee-keepers go at the matter of breeding bees wrong end to. When a dairyman wants to improve his herd, if he is financially able, he buys the best bull he can obtain. To be sure, he may buy one or more cows of the right stock, but the bull is the main thing. So it is with the sheep-breeder, the poultry-breeder—in fact, with the breeder of any kind of live stock ex-



# American Bee Journal

cept bees, improvement is sought through a new sire. The bee-keeper, instead of paying any attention to the sire, gets a new dam. Even if he has in his apiary one or more colonies of superior stock, nine times out of ten he does nothing to encourage drones in these best colonies, and to discourage drones in other colonies but leaves the matter of drones entirely to the bees.

Swiss bee-keepers do better. They have their mating-stations, as mentioned, and they are so isolated that drones of only one particular strain are to be found at each. To one of these mating-stations a virgin may be sent in a fertilizing-box and returned after being mated, parcels post making the matter of transportation inexpensive. The present outlook is that parcels post will be established in this country before very long, and surely isolated localities may be found in this country as well as in Switzerland. Even supposing it should be desired to have a mating-station in a place where bees of all kinds already exist, if the matter were in the hands of the Government or a considerable company of bee-keepers, it would not be so very difficult to obtain control of all drones within a proper radius.

## Non-Sitters and Non-Swarmers

Referring to the first editorial on page 197, Mr. C. P. Dadant writes:

"The point made in the first editorial concerning the eliminating of swarming by comparing it to hens sitting is a thing that had never occurred to me, and I think it is very ingenious. If it was possible to carry it to that point, it would be a great victory. However, there is no suffering for hens that do not sit, and there would be a great deal of inconvenience for bees that would not swarm unless their owner was constantly relieving them by giving them room. But there is a good argument to be made, nevertheless."

Yes, there is no doubt that no slight victory would be achieved if we could have a strain of bees in which the in-

clination to swarm would be just as little as is the inclination to sit in the so-called non-sitters among hens.

Mr. Dadant thinks there is a lack of parallel, in that bees suffer inconvenience when they do not swarm, and there is no such inconvenience for hens that do not sit. It is true that in many cases—probably in most cases where swarming occurs—possibly in all cases—the bees suffer from being crowded, and swarming gives relief. Is it not possible that there is equal suffering on the part of the biddies, to which suffering sitting gives relief? If we should put a broody hen on the witness stand, her testimony might be something like this:

"After having laid a nice lot of eggs, I was seized with a strong desire to sit on them. My mistress took them all away from me, I could sit just as well on the empty nest, and I did. Then she put me in cold water. I don't know what for. I wanted to sit as much as ever, and went back to my nest. Then she tied a string to my leg and tied me to a post. It was torture to me not to be able to get to my nest, but I did the next best thing and sat on the ground. Her little boy came along and let me loose, and you may be sure I was soon back on my nest. Oh, how good it did seem to be able to 'cuddle doon' and just sit and sit! If my mistress knew what real suffering it is not to be permitted to have my 'sit' out, I don't believe she would try to stop me."

But admitting all the discomfort there may be for the bees when lacking room, is not Mr. Dadant putting it rather strong when he talks of "constantly" relieving them by giving them room? It may be well to inform him that at Hamilton, Ill., there are bees which do not swarm—or at least 95 percent or more of them do not swarm—and it has never been made public that their owner spent much time in giving them more room. If enough room were all that were needed, that could be given once for all, enough and more than enough for the season.

It will hardly do to admit that poultry-men are so much ahead that they can to a large extent breed out a natural instinct, and that bee-men can do nothing in that line.

enhuetten leer?" (Why do so many apiaries in the villages stand empty?)

The author says that statistics show that in the past 7 years there has been a falling off of 10,650 in the number of colonies of bees in Germany. When asked why their hives are empty of bees, farmers are likely to reply that they have no luck with bees, and that they have died off. The author tells them that they have no luck because they have no knowledge of what is going on in the hives, and especially that they never have seen a queen, and allow each queen to live so long as she likes. Old queens and drone-layers are at the root of the trouble, with box-hives to make matters worse.

The author makes requirements of the common bee-keeper that would be considered rather exacting for the specialist in this country. He says that one with a considerable number of colonies should keep books and write down the birthday of each queen, the day of her fertilization, the beginning of her egg-laying, her prolificness, color, size, and other characteristics.

Instructions are given as to prevention and cure of drone-rearing colonies, and instruction as to other matters to raise bee-keeping from its declining condition.

Bee-keepers in this country would be inclined to put a question-mark after the statement that a young queen is fertilized after 3 days, and that no colony swarms so long as it builds comb or has open brood to nurse.

**Unusual Sensitiveness to Stings.—K. Koch** says in substance in *Prak. Wegweiser*: In 1909 a teacher in East Prussia wrote me that he would have to give up bee-keeping because a sting always caused coughing, difficulty of breathing, palpitation of the heart, and vomiting. In such cases the patient has within himself the seat of disease, the sting being merely the exciting cause that makes the hidden disease assert itself. I advised a cold bath every morning, the avoidance of coffee tea, or anything else to excite the nerves, recommending Kneipp-coffee (roasted barley) instead. He continued the cold baths for 3 months, and if he was stung any time after this he at once plunged his feet in cold water and the disagreeable symptoms failed to appear. The working of this last means is this: Through the cold water the blood, which otherwise would call forth the irritation and oppression in the chest, flows downward to the feet to restore there the loss of heat caused by the cold water.

## Moving 100 Colonies 1200 Miles.—

Wm. L. Couper reports in *Gleanings in Bee Culture* that he moved 100 colonies of bees from Manor, Saskatchewan, to Hatzic, British Columbia, a distance of about 1200 miles, taking about 6 days for the trip. The hives were packed in such way that water could not be given on the way, but the weather was so cold that the first night of the trip the water in the water-barrel was frozen so hard that the ice had to be chopped out with an ax. One colony was a total loss, the bees being practically all dead, while two others were so decimated

## MISCELLANEOUS



## NEWS ITEMS

**The Minneapolis Convention.**—We can not attempt in this number to say very much about the Convention of the National Bee-Keepers' Association held in Minneapolis, Minn., Aug. 30th and 31st, further than that there was a good attendance, and it was a live meeting from beginning to end. In addition to a great deal of very valuable discussion, a new Constitution was proposed, and recommended for approval to the membership at the November election. At that time a full copy of the new Constitution will be mailed to each member, and also the nominations for officers and directors to be elected.

Next month we hope to give a brief review of the Convention, and also tell somewhat in detail of the generous entertainment accorded to the visiting members by the Minnesota Bee-Keepers' Association, after the Convention

was over. We regret the lack of room and also time in this number for a fuller report of the meeting. But it will keep all right for another month. We might add, however, for the encouragement of the National membership who read the *American Bee Journal*, that plans were made for a delegated organization, which, when carried into effect, will give something very much superior to anything we have ever had in this country in the line of a National organization of bee-keepers.

## Decline in German Bee-Keeping.—

—From the publisher, Alfred Michaelis, Leipzig, Germany, has been received a pamphlet of 44 pages, written by Prof. Reinhold Michaelis, with the expressive though not very brief title, "Warum stehen auf den Doerfern so viele Bien-

# American Bee Journal

that they were united with other colonies. But all 3 of these colonies had their combs broken down, and the entrances were choked with dead bees and honey. Mr. Couper gives his manner of packing as follows:

The bees were confined by means of wire-screen covering the tops and entrances. I did not have enough wire-cloth to pack all of the colonies in this way, so over the last 9 or 10 hives I stapled a bottom-board, deep side down, with the entrance on the opposite end to the lower one so as to give a through draft and an air-space above. These colonies traveled as well as those covered with screen. The first row was packed against the back wall of the car, frames parallel with the rails, and hives as close together as possible. The second row was then put in place on the floor of the car, the back end of the bottom-boards touching the front end of the first row. Then a 6-inch board the full width of the car was laid so that it overlapped both rows of hives, and was nailed to every second hive. Besides fastening all the hives solidly together, this plan had the advantage of leaving a clear air-space between the tiers of hives, which were packed high, each tier being fastened in the same way. Above the hives, supers were piled to the car roof, and were also placed in front, as I wished to exclude the light as much as possible. Boards were nailed across the front end of these supers, held in place by cleats spiked to the sides of the car. I used inch boards here, but 2x4's would have been better, as they sagged considerably in the course of the trip, and one pile of supers worked loose and fell on the cow.

**Finding Queens.**—Mr. J. E. Crane gives in *Gleanings in Bee Culture* the following method of finding queens:

Some time in the winter I read in *Gleanings* of a basket or box made of perforated zinc, to shake bees into for catching or finding queens. Well, I made one with legs to hold the basket a little above the ground, and it is a great success. I wouldn't take ten dollars for it if I couldn't make another. How easy to shake a swarm into a basket and let the bees through and find the queen!

**Worker-Eggs in Drone-Cells.**—The editor of the *Australian Bee Bulletin* quotes this from the *American Bee Journal*:

"There have been a good many reports of worker eggs being laid in drone-cells, but probably no case has yet been found in which the bees have not first narrowed the mouth of the cell."

Editor Abram inquires why the editors of the *American Bee Journal* have never "thought to put such simple tests to practice," and adds:

"It so happens that I have made the experiment several times, and I had in spirit of wine for years samples of drone-combs with bee-brood in various stages in the cells, some where the bee had hatched and also the bees hatched therefrom, and many persons have seen them thus preserved, but though the capped cells looked almost like drone-brood the bees hatching were the usual size, and the thus emptied cell looked like any other drone-cell."

To Editor Abram's question it may be replied that the writer has more than once put the matter to the test, although generally undesignedly. Generally, when drone-comb has been given only drones have been reared in it, because the bees desired drones. But in some unusual cases, as where a patch of drone-comb was right in the brood-nest, the bees having a vigorous young queen that had been laying but a short time, and no drones desired, workers would be reared in the drone-cells.

Editor Abram says "the capped cells looked almost like drone-brood." Well, here the capped surface was flat, as over worker-cells. He says "the thus

emptied cell looked like any other drone-cell." Here, the difference was easily seen. The mouth of the emptied cell was narrowed to the size of the worker-cell. Editor Abram's bees seem to do differently.

**California Honey Crops.**—In a pamphlet issued by the California Development Board, entitled, "California Resources and Possibilities," we find the following under the head of "Honey:"

While honey is produced for the market in all of the principal valleys, the great bulk of the commercial product comes from the San Joaquin Valley and the counties south. The crop for 1909 was the record crop, and nearly double the average. The estimates of the honey product for several years are:

Year.	Pounds.
1899 .....	2,822,000
1900 .....	2,208,000
1901 .....	8,112,000
1902 .....	5,125,000
1903 .....	8,400,000
1904 .....	7,000,000
1905 .....	9,500,000
1906 .....	5,350,000
1907 .....	8,700,000
1908 .....	5,250,000
1909 .....	11,532,000
1910 .....	5,500,000

It seems the highest estimate was for 1909, when there was about eleven and a half millions of pounds. That would be only about 330 carloads averaging 35,000 pounds to the car. We don't think the estimates for the several years are too high, judging from other reports that we have seen from time to time during the past 12 or 15 years.

We wonder what the estimate for the crop of 1911 will be.

**The Borrowing Habit** is thus happily put in a rhyme sent to us by R. L. Wildman, of Oregon:

"Don't stop my paper, printer—  
Don't strike my name off yet,  
Though times are rather stringent  
And money hard to get.  
To scrape a little harder,  
Is what I mean to do,  
And scrape the dimes together—  
Enough for me and you.  
I hate to ask my neighbors  
To give me theirs on loan;  
They don't just say—but mean it—  
'Why don't you have your own?'"

It is a good thing for each person or family to have a copy of any publication, or anything else, for that matter, so as not to borrow from friends or neighbors. Of course, emergencies will arise when it is necessary to borrow temporarily.

**A Roll of Wire-Cloth as a Strainer.**—Carey W. Rees, in the *Bee-Keepers' Review*, describes a honey-strainer that is novel, inexpensive, and efficient. He says:

To make this strainer, use a half-gallon tin bucket. If the upper edge has a rim, unsolder the rim so that the inside is smooth and even. The bucket or can must be straight and not flaring. Then get a piece of galvanized wire-cloth, the kind that is used for door and window screens. The wire-cloth should be about 12 or 14 inches wide. Roll up the wire-cloth until there is about 7 thicknesses of wire; then place one end inside of the can or bucket you have prepared for it. Now take some cappings and press them into the middle of the wire coil until the can it is in is about half full, or, perhaps, nearly full, when the strainer is ready for use. If one wishes, one can cover the bottom of the wire-coil with a cloth, and tie it by wrapping a string around the wire coil and cloth. I don't often use the cloth because it is a little more work to tie

it on. When the day's work is done, remove the wire coil, which should have a string around it so it won't unroll. Take a screw-driver and push out the cappings, and so forth, from the inside of the coil of wire. Put it back in the can and press in some more cappings, then it is ready for use again.

It does not need washing often. The honey should fall into the middle of this coil of wire.

If it does not strain well, use another coil of wire, and roll it until there are thicknesses of wire enough so it will do good work.

If it does not strain fast enough, make one a little bigger around, or higher; either one; it will not have to be very large.

I set the strainer in a flat-bottomed funnel; the funnel leads the honey into the honey-can. The can that the coil of wire is in has a tight bottom, and the strained honey flows over the top of the can through the wire into the funnel. Sometimes the honey rises up nearly to the top of the wire coil, and strains all the way up.

**Swarm Control.**—Under this heading appears the following from T. Stapleton, in the *British Bee Journal*:

"For many years past I have tried various methods of swarm control, and discovered about 5 years ago a very simple but reliable method that will work in all stages of condition. It is as follows:

Select the method which suits your purpose best to supply as many queens as are required for the apiary. When they are hatched and removed from their hives, before they have fed if possible, such queens may be run into any hive that we desire to prevent from swarming; it should be done in the middle of a fine day, when bees are gathering freely; run in the young queen at the entrance. No care need be taken of the old queen, unless she is required for further use. "What about queen-cells?" may be asked. If any are present, the young queen will look after them. I have run in from 10 to 15 a day, until I have requeened the whole of my apiary without a single failure."

After having been tried for 5 years, apparently with a considerable number of colonies, it would seem that the method might be considered reliable, yet it is still possible that it would succeed under some conditions and fail under others. G. M. Doolittle, some years ago, gave practically the same thing, but he by no means made so broad a claim for it. His teaching was that if, toward the close of the season, a virgin be given to a colony that was thinking of superseding its queen, the virgin would be accepted in most if not all cases. Evidently that applies only when the queen is somewhat advanced in age, and at a certain season of the year, while Mr. Stapleton says nothing about the age of the queen or the season of year. No doubt he is right that a virgin directly from the cell will be kindly received in any hive. She is an innocent baby, and no one thinks of her doing any harm. But wait till she becomes a few days old and begins to "put on airs" as one making pretensions to the throne, and if the reigning queen be one in vigor, whom the bees have no notion of superseding, an untimely death will be the fate of the interloper.

**Bee-Keeping in England.**—We have received the following from Mr. Frank Benton, taken from the *London Times* of Aug. 1, 1911:

Bee-keepers will be gratified at the decision of the Treasury to make a substantial grant of money to the British Bee-Keepers' Association for the promotion of practical and scientific bee-keeping. Although the Board of Agriculture and Fisheries has done much useful work in furthering this industry, it has long been a grievance



# American Bee Journal

amongst bee-keepers that direct State aid has not been rendered, in view of the fact that such assistance has been forthcoming in the case of several of the British Colonies as well as in the case of France, Germany, Russia, and other foreign countries.

The grant of a sum not exceeding £500, (which has been made on the recommendation of the Development Commissioners,) will enable the British Bee-Keepers' Association to do much-needed work in the general organization of the industry, including the promotion of county bee-keeping associations and the giving of lectures of an elementary and introductory type calculated to attract the interest of country audiences to the advantages of bee-keeping.

A further grant of £350 has specially been allocated for the purpose of enabling an experimental apiary to be provided in a suitable central situation, such apiary to be equipped with the requisite modern appliances used in bee-keeping for demonstration purposes. In connection with the apiary there will be arrangements for the training and examination of lectures; consequently there ought to be in course of time a marked improvement in the qualifications of these officials, whose services have in recent years been so much requisitioned by county councils. It is not at all improbable that the number of these will have to be materially augmented owing to the impetus to apiculture by State assistance.

There is an experimental apiary in the Luxembourg Gardens in Paris, where varieties of frame hives can be inspected and advice obtained as to the most suitable to be used, the manipulation of colonies of bees being demonstrated by capable officials. Interesting evidence was laid before the Development Commissioners on April 27 last, by Mr. Walter F. Reid, one of the witnesses, as to the interest taken by the general public in this apiary.

Bee-keeping has received a serious setback in recent years owing to the prevalence of what is generally called the "Isle of Wight disease," which has destroyed countless colonies of bees throughout the country. It may be added that fruit-growers were amongst the first to appreciate the gravity of the harm which would result to their industry from so great a decrease in the number of colonies kept. Consequently the financial assistance for the promotion of apiculture which is to be given by the Treasury, will tend to restore confidence and to give much-needed encouragement to those engaged in bee-keeping.

**"Queenie; the Autobiography of an Italian Queen-Bee."**—This small work by T. Chalmers Potter, just published, has the rather pretty conceit, as its title suggests, of telling in the language of a queen-bee what happens among bees. It can hardly be recommended as a book of instruction for one who knows nothing about bees, its statements being too much at variance with the actual facts.

We are told that a queen-cell prepared for swarming is six-sided; which is true of a post-constructed cell, but not of a queen-cell built while the old queen is present.

A queen-cell looks like a hanging peanut shell, only the color is somewhat darker, sometimes almost black. It would have been well to add that a queen-cell may also be even lighter than a peanut shell, depending upon the color of the surrounding comb.

The cells that are almost black, according to the story of the queen, are those that "are left on the combs of a hive by the bees for a long time, and used as the birthplace of other queens."

That the same queen-cell has been used the second time by the bees will be news to bee-keepers.

Quahking is the note uttered by a virgin in her cell, "and sometimes uttered when two queens are at liberty in the colony when a battle between

them may be impending." Was a queen ever known to quahk after being outside her cell?

In the case of a prime swarm, we have the remarkable statement that the first virgin to mature was ready to leave her cell two days before the issuing of the swarm, but was held captive in her cell by the workers until the old queen left with the swarm. And this seemed to be given as the normal procedure. Did such an exception ever happen?

All these errors occur in the first dozen pages of the book, and the remainder of the 70 pages of reading matter have their full share of errors. Too bad that the author should not have been more familiar with his subject, or that he did not employ an experienced bee-keeper to revise his manuscript.

**Mr. A. Godon**, whose picture is reproduced herewith, and who died in June, 1911, was president of the Society of Apiculture, and editor of "L'Abeille



A. GODON.

*Bourguignonne*," a periodical published under the direction of that association, and now in its 27th year.

Mr. Godon was one of the champions of progressive bee-culture in Eastern France, and had devoted most of his time to the spread of new methods among the country people.

**Japan Clover.**—Farmers' Bulletin 441 of the United States Agricultural Department highly commends *Lespedeza*, or Japan clover, as a forage plant for the South, especially for the cotton-belt. No mention is made of it as a honey-plant, but it will probably be an addition to the honey-resources.

**Saccharin in Food Prohibited.**—This substance, which is said to have 300 times the sweetening power of sugar, and which has been used as a substitute for sugar in over 300 classes of foods in which sugar is commonly recognized as a normal and valuable ingredient, has been given a black eye by the United States Department of Agriculture. Food Inspection Decision 135 says that if the use of saccharin be continued it is evident that amounts

of saccharin may readily be consumed which will, through continual use, produce digestive disturbances; and "the Secretary of Agriculture, therefore, will regard as adulterated under the food and drugs act, foods containing saccharin which, on and after July 1, 1911, are manufactured or offered for sale in the District of Columbia or the territories, or shipped in interstate or foreign commerce, or offered for importation into the United States."

**Which Bees?**—The following is sent us by Mr. G. E. Bacon, advertising manager of the G. B. Lewis Co., Watertown, Wis., who says that it "might be appropriate for the American Bee Journal:"

FAIR ENOUGH.

Indignant Stranger—Here! coming through your garden I've been stung by one of your confounded bees!

Bee-Culturist—Which one? Just you point it out, sir, and I'll deal with it immediately.  
—Philadelphia Bulletin.

**The Oklahoma State Convention** will be held in Oklahoma City, Okla., Tuesday, Oct. 3, 1911, on the State Fair Grounds, in the evening. The program is as follows:

How a Good Location May be Made Better—B. F. Bartholomew.

Does it Pay to Keep a Tidy Bee-Yard?—Grover Boardman.

Why Bees Should Interest the Farmer—E. Q. Couch.

Why Bees Should Interest the Business Man—Arthur Rhoads.

The Necessity of an Association—G. E. Lemon.

Some of the Science of the Bee—Prof. C. E. Ashmead.

Some Observations of the Growth of the Industry in Oklahoma—F. W. Van De Mark.

How I Caught the Bee-Fever, and Why I Still Have It—Joseph Hegeisen.

Some Comparisons of Northern and Southern Bee-Keeping—Geo. H. Coulson.

All interested are cordially invited to be present.

ARTHUR RHOADS, Sec., Coyle, Okla.  
N. FRED GARDINER, Pres., Geary, Okla.

**The Missouri Bee-Keepers' Association** will meet Sept. 27 and 28, 1911, during the Electric Park Co.'s Missouri Valley Fair at Kansas City, Mo. All members are requested to be present, and any one interested in bees and honey is cordially invited to attend. There will be several lectures given on the management of apiaries and the production of honey. A live-bee demonstration will also be given daily, showing the public how bees can be handled. All bee-keepers having any nice honey should write the Electric Park Co., Kansas City, Mo., for their Fair catalog. M. E. TRIBBLE, Sec. Marshall, Mo.

**N. Illinois and S. Wis. Convention** will be held in the Court House in Freeport, Ill., Tuesday, Oct. 17, 1911. All interested in bees should be sure and come and bring anything new that you have that would be of interest to bee-keepers. The question-box will be a prominent feature of the meeting.

B. KENNEDY, Sec.  
Cherry Valley, Ill.

## BEE-KEEPING FOR WOMEN

Conducted by Miss EMMA M. WILSON, Marengo, Ill.

### Bee-Keeping for Working Girls

Editor Digges, of the Irish Bee Journal, finds no difficulty in recommending the industry of bee-keeping as a profitable occupation for girls whose allowances are small. He says:

"If \$50 would come in handy as an increment; if \$100 would help to balance receipts and expenditures; if \$150 would pay for extra toques and gowns, extend a needed holiday, or serve some other useful purpose, there is no real reason known to us why such sums should not be raised by any diligent girls, suitably situated, who would set to work at bee-keeping. As work, it demands no extraordinary physical strength; it is healthy, invigorating, fascinating; it is recreation as well as work; it is a nature-study, lifting the mind above the humdrum affairs of ordinary domestic life; free from danger in itself, it offers a safe retreat from the male bore, who is usually in terror of bees; and it is an occupation that suits itself most agreeably to the quiet temper, gentle touch, and patient, persevering attention to detail, which women and girls, much more than men, can bring to bear upon it.

### A Good Price for Honey

No, I would not like to be without the American Bee Journal so long as I keep bees, which will be as long as I live, I hope. I love them dearly; they are doing well for me, considering the pasture they have. I have 19 colonies, and run for comb honey—pound sections wholly. I get 25 cents per pound. Is not that good?

Raymond, N. H. Mrs. A. E. LAURENCE.

You are certainly to be congratulated on the price you get for your honey. As long as you are able to dispose of it at such a price, would it not be a good thing to keep a larger number of colonies?

### Taking Off Honey—Keeping Empty Combs

I never have any trouble taking off supers of comb honey; in fact, I wish I could take off some each day, as each section of nice white honey makes me smile. I take the smoker and brush-broom, and then open the hive very carefully, and raise up the cover of the super, and smoke the bees until they leave the top of the super; then I pry it up with the handy Ideal hive-tool. (I could not do without it.) I lift the super off, lean it against the hive, put on the cover, and set the smoker on the hive-cover; pick up the small brush-broom, and brush all the bees I can off the super, then carry the super (which is sometimes pretty heavy for a woman to carry) to a table under a shade-tree, some distance from the hives. On the table are two small sticks to set the super on, and to keep from crushing bees, for I never kill a bee if I can help it. With the hive-tool I pry out the sections and holders, piling the perfect sections in a pan very carefully, and putting back into the super the unfinished sections with starters to fill the super again. I then carry the super back to the hive, use the smoker freely, and put the super on the hive.

Then I send word to the neighbors that I have taken off some honey, and John and I have biscuits and honey for supper.

### EMPTY BROOD-COMBS RUINED IN WINTER

All people have troubles of their own, but I want them to know of some of mine. In the fall of 1910 I had some nice, straight brood-combs which I had saved during the year from colonies I had united, and, of course, meant them to have swarms on in 1911. Each brood-comb represented its weight in cents. Part of the combs I stored down cellar on a swing-shelf, in a dark room, and the rest in a light room upstairs. Imagine my dismay to find, last spring, that the combs that were upstairs were eaten into shreds by a hairy bug or worm, such as work on dried beef; and the ones in the cellar were spoiled by the bee-month, which, after making the combs useless, had gone into winter quarters in nice beds all along the brood-frames. I did not suppose the combs would be harmed through the winter months, but they were spoiled.

OHIO BEE-WOMAN.

### The Bee-Veil and Bee-Stings

BY KATE LOWE GRAHAM.

O bee! I can hear your loud humming;  
I want to get close to you, dear;  
But the sting in your tail keeps me fussing—  
The tale of a sting is what I much fear.

The little gold bands on your back, dear,  
Your eyes in such crowds on your head,  
And those lovely antennæ so black, dear,  
Are so nice—but the sting's what I dread.

The baskets you wear on your thighs, dear,  
Are big, and so goldenly packed;  
And your wings are as fine as your eyes, dear,  
And the honey's so perfectly sacked.

When you're sailing up close to the hive, dear,  
And the landing's not easy to make,  
It's fun to see just how you dive, dear—  
Like an air-ship not sure of its brake.

Now the cactus and the greasewood are bloom-  
ing,  
And the sun's steering Northward again;  
You are working all day till the gloaming—  
Each one of you working like ten.

I've seen you dive down in the lilies;  
I've seen you sail off on the wing;  
But I am not going to be one of the sillies,  
Walking around with a terrible sting.

That's why I sit on the fence, dear,  
And watch you flock up from the place  
Where prickles and gold-balls are dense, dear.  
With this funny bee-veil on my face.  
Socorro, Mexico. —Gleanings in Bee Culture.

### Bar le duc Currants and Honey

Pick over selected red or white currants, wash, drain and remove from stems. With a sharp-pointed penknife

make a very small cut in each berry, and take out the seeds one at a time, using a needle, so as to break the fruit as little as possible. Use equal weights of prepared fruit and extracted honey. Put the honey in a preserving kettle, and, when heated, add fruit, bring to the boiling-point, and let it simmer 4 minutes. Skim out the fruit and put it in small glass tumblers. Cook the syrup until thick, and fill the jars with it. Cover the top of the glasses with a circular piece of paraffin paper, then tin-foil, then 2 thicknesses of white paper, fastened over the sides of the glass with library paste and then tied with a string.—W. H. COMP.

### Honey in Place of Sugar

The Van Thomas Co., of Los Angeles, Calif., is making plans for a book of recipes in which honey is used exclusively for sweetening. This is a move in the right direction. If the mothers of our land could be brought to understand the truth in regard to using honey in place of sugar, its consumption would be doubled in a very short time.—Mrs. H. G. ACKLIN, in *Gleanings in Bee Culture*.

### Honey-and-Oatmeal Cookies

Granulated sugar, 1½ cups; honey, ½ cup; 2 eggs and a cup of melted butter. You can put some lard with it if you wish. Mix the sugar, honey, and butter; then add eggs, and beat lightly. Dissolve ½ teaspoonful of baking-soda in 4 tablespoonfuls of hot water; one teaspoonful of cinnamon, and ½ teaspoonful of cloves; one cup of finely cut raisins; roll in a little flour; add 3 cups of flour; 3 cups of rolled oats; mix all together and roll out on a board to medium thickness; cut in small cakes, and bake in a moderate oven. Keep in an air-tight box. (We never need the box, as they don't last long around here.)—WENDT BROTHERS, in *Gleanings in Bee Culture*.

### Honey for Burns and Chilblains

"For burns and scalds pure extracted honey is very good; it will generally relieve the pain in a very short time, and induce the wound to heal very rapidly." A writer quoting the foregoing from a medical work, records that in a case which came under his own observation, where a man had his hands badly scalded, the cure worked favorably. The hands were dipped in honey and wrapped in cotton wool, the application being renewed in course of time.

As a consequence of moving about in cold weather with damp feet, children are frequently troubled with chilblains. Honey helps to cure them. Coat a piece of cloth with honey and apply it to the sore when the child is going to bed. A few applications should bring about a cure.—D. M. MACDONALD, in the *British Bee Journal*.

I derive a great deal of information from the pages of the American Bee Journal, and will never allow the "measly" price of \$1.00 to come between myself and the loss of the Journal. W. R. CUNNINGHAM.  
Rayville, La., July 1.



## CANADIAN



## BEEDOM~

Conducted by J. L. BYER, Mt. Joy, Ontario.

**Extreme Drouth and Poor Crops**

At this date (Aug. 18), the drouth is still unbroken in our locality. There is quite a large acreage of buckwheat around us, but with such extremely dry weather, of course little nectar is being secreted. Rain within a week might still mean some honey, but just now there are small prospects of rain. It is needless to say the bee-keepers are not the only sufferers, and, all things considered, the crops are the poorest in our section that we have any record of. No matter how fertile the soil, if Jupiter Pluvius withholds his services vegetation can not grow.

Some time ago I remember reading how they keep grass away from hive-entrances in some of the Western States—simply keep away the water, and the trick is done. Well, that is what has happened here this year, and for about 2 months it has not been necessary to cut any grass around the hives. Unfortunately, we have not the means, though, that they have in the States referred to—of *giving* water to places not *near* the bees, and so, after such an experience as we have had this year, we prefer to have rain, even if it does mean that grass will have to be cut in front of the hives.

**"In Everything Give Thanks"**

Much obliged, Dr. Miller, for that able sermonette given at a time when it must appeal to a host of others who "are in the same boat as yourself." The August American Bee Journal came to hand a few mornings ago, as I was on my way to the city for that day. While waiting at the depot for the train, I read the item in question (on page 243) to a few friends that happened to meet with me there, and all pronounced it as being capital advice to the questioner, and "just what you might expect from the Doctor."

While I have no doubt that intimate friends would give the writer of these notes the credit of at least being a "cheerful idiot," yet I must confess that there are times when the thought comes that things are not going as I would like them to, and at such times a message like the one referred to, does so much good. All day long, while going about the city on business matters, the "thankful idea" remained with me, and my! it is wonderful how much we have to be thankful *for*, when we begin to compare our lot with that of some others less fortunate than ourselves.

As one perchance goes through some of the poorer quarters of a great city, and sees the squalid misery to which many are doomed all their life, how thankful we are, or at least should be, that our lots have been cast in so much more pleasant places. As I passed

through great factories, where men and boys and girls work 10 hours a day the year around at work that appears so monotonous to the onlooker, how thankful I was that my life was being spent in God's pure air and sunshine, and that I was not doomed to act as a "machine operating another machine"—really, that is the way the matter appeared to me as I watched operators working in a noisy room, turning out by "piece work" the same kind of utensils, hour after hour.

It is needless to say, as my mind dwelt on these matters, I almost forgot that the "crop was short," and my advice to those who may be subject to the "blues," is always to try to see how much better you are off than your more unfortunate brother—it surely will work a cure, every time.

What a pleasant world this would be if we could all exemplify the spirit of a couplet that just now comes to my mind—at present I can not recall the name of the writer. It runs something like this:

"The inner side of every cloud is always bright and shining;  
I therefore turn my clouds about,  
And always wear them inside out,  
To show the lining."

**Reciprocity and the People**

Referring to the "reciprocity" discussion in the bee-papers, as mentioned on page 229, I might say that every paper picked up has the word showing on every corner, so perhaps it is a blessing that the bee-papers, at least, are giving the subject a rest. Now that the issue is being fought out in a general election here in Canada, we certainly are getting lots of "education" on the subject, as about every mail brings literature franked through from Ottawa, by both the opposition and the Government members. Personally, I feel that the right tribunal is being consulted, and shall be content to accept the verdict, whatever it may be, without any squealing, as the majority must rule.

With such a momentous question at issue, I rather feel that Canada is taking a better course in the matter by consulting the people, for after the fight is over the defeated party, whichever it may be, will have the assurance that it is in the minority, and will likely take defeat with better grace than would have been the case if the thing had passed without first appealing to the people.

**Bee-Papers and Whiskey Advertising**

The "American Prohibition Year Book for 1911" has an "honor roll" of the different magazines and newspapers that refuse to accept whiskey advertisements, and in some way the names of the bee-papers have been omitted from

this roll. The eagle eye of the editor of the American Bee Journal happened to notice this, and wrote the National Chairman, calling his attention to the omission. In the issue of the "American Advance" for July 29, Editor York's letter is gracefully acknowledged, and the editor of the "Advance" concludes as follows:

"Mr. York has long been known as one of the staunchest Prohibitionists of Chicago, and the 'Advance' is very glad indeed to accord this credit to the leading journals of this prosperous and happiness-bringing industry."

Mr. York called attention to the fact that for over 25 years, to his personal knowledge, not a single bee-paper in the country had accepted a liquor advertisement, "and none of them would think of doing so."

Aside from the moral aspect of the case, it appears to me that bee-keepers owe Editor York a debt of gratitude, from the fact that incidentally the "Advance" gives a very nice write-up for the bee-keeping industry. In proof of this let me quote the first few paragraphs of the article in question, wherein the paper acknowledges Mr. York's letter:

"There is all the difference in the world between honey and whiskey.

"In the first place, whiskey carries its sting wherever it goes, while honey leaves it behind in the hive from which it originally came.

"In the next place, scientific investigation has proved the value of honey as a nutritious food, while science and medicine alike are uniting to expose the falsity of the food claim for any alcoholic beverage."

[Since the "American Advance" published that the bee-papers do not print whiskey advertising, a Kansas City, Mo., whiskey firm sent us an advertisement. Upon our "firing" it back at once, and advising them to "get into some honest business quick," they were terribly offended, and almost threatened to wipe us off the face of the earth! We repeated that we think the whiskey business a dishonest business, and thought our advice good—that they ought to follow it, and get out of a bad business that ruins so many of their fellowmen.

You know, the Devil doesn't like to hear the truth, and so one Whiskey Devil squirmed a little. But some day, bee-keepers and a lot of other good people will unite in helping lots of folks to get out of the bad business, and force them to look up an honest business. May be some of them will keep bees, and then sell honey instead of whiskey! Who knows?—G. W. Y.]

**Coal-Oil and Carbolic Acid to Prevent Robbing**

Much is being said at the present in the different bee-papers relative to the value of carbolic acid in the apiary as a prevention of robbing. While I have never had any experience with the acid, I can readily believe it would be effective, as I have often used coal-oil, and know it to be of great value. If a hive is being robbed, pile a bit of hay around the entrance, dampen it with water, and then also add some coal-oil, and robbing will stop instantly. Even a queenless colony can be saved this way, and I would readily believe

# American Bee Journal

that carbolic acid would be even more distasteful to the bees than coal-oil.

Relative to what a correspondent says in this Journal as to the effect of carbon bisulphide on the eggs of the wax-moth, the editor asks (page 233) whether it is a fact that the stuff will kill the eggs. No, sir, there is nothing in the claim, for carbon bisulphide *will* kill the eggs of the wax-moth every time, if properly used, as I have proved conclusively more than once. Many a time I have packed away hundreds of

combs in a large box, and *one* treatment always did the job perfectly. Needless to say, the combs at the time of treatment contained eggs, larvæ, etc., of the wax-moth, and from the fact that the one treatment always sufficed, there is no disputing the fact that it will kill the eggs as well as the larvæ.

By the way, the name of the drug over here is always spelled "carbon bi-sulphide" on the labels that are put on the bottles.

swarm get up this far, it would doubtless perish for lack of winter stores. Honey-bees would flourish here for 5 or 6 weeks during the summer, and one could have a bee-breeding station located high in the mountains, as this is, and the queens be in no danger of crossing with any neighboring undesirable drones. Just as soon as I can get to it several such experimental points are going to be established. They can easily be reached by rail, and the bees could be brought up each summer and taken back to the valley, at slight expense. No feeding would need be done during the time the bees were up here, I think. Chaff hives will be the best to use, as our nights are always quite cool. Such a place as this would be far better than trying to mate queens in confinement, I should think.

Attempts have been made to establish a breeding station for bees out on the dry plains, but the conditions are so unfavorable to the life of the bees that success has never been had with this plan. The plains are so hot and dry, and there are no flowers, or scarcely any vegetation of any kind, that the bees would do nothing, feeding having to be done all the time. Some feeding would be needed here, no doubt, but there is an abundance of pollen and some honey available, and conditions are conducive to bee-life, which is *essential* to any breeding experiments.

Right in this connection I might say that wherever the honey-bee is not found, wild bees of many kinds abound. They are more limited in range, for many of them work on but one kind of flowers.

In Boulder Canyon, 2 miles west of Boulder, sweet clover grows very thick; but few if any honey-bees visit it, while wild bees and wasps of various kinds keep up the busy hum.

## Comb Honey and the Section-Box

The waste in effort to get the bees to work in section honey-boxes between separators is too great to be long endured by the bee-fraternity. And still I do not think it likely that comb honey will lose its favorites. We shall find a new way of putting out comb honey, so that it will ship as safely as extracted, and can be built by the bees almost as rapidly as extracted is produced. The new way will probably be something similar to the way Nabisco wafers are put up—in tin boxes. The combs can be cut, and after most of the drip has leaked off, the combs can then be wrapped in paraffined paper, packed in the tin boxes, and crated in boxes the same as soap or any other boxed goods. I believe it is time we were working along this line, as the sooner the demand for comb honey in some such shape as I have mentioned is cultivated the sooner will our profits begin to mount. We will have overcome the bugaboos of comb-honey shipments, and getting the bees to work in the comb-honey supers.

Swarming is no problem to speak

## FAR WESTERN BEE-KEEPING

Conducted by WESLEY FOSTER, Boulder, Colo.

### Parcels Post Must Come

We are less ruled by the conventional ideas as the years roll on. We have been taught that the Constitution was sacred, and must be revered; that the Supreme Court is always right, and somehow the idea has continued to lurk about in the dark corners of our subconscious selves that what always had been always would be. But now we are waking up to the fact that the Constitution is man-made, and, when it serves him not, the thing to do is to change it to correspond with the Supreme Constitution, which is the mind of the people. And, also, we now are beginning to recognize that the Supreme Court also derives its just powers from the people, who finally are the court of last appeal.

Commerce is the moving of things from where they are plentiful to where they are scarce, and any thing—obstacle, person, company or law—that prevents things of human need from moving freely to the persons needing those things, is in the nature of a brigand demanding tribute at the hands of honorable industry.

The express companies are operating in violation of a law passed away back in 1848, which expressly prohibits private companies from carrying packages in competition with the Post-Office; yet the express companies carry thousands of packages weighing less than 4 pounds, and they have control, absolutely, of the business on parcels weighing more than 4 pounds, up to what can be profitably sent by freight.

It is time that we utilize the Post-Office Department as it is now organized to carry all packages. The work could be done with but little addition to the expense. President Taft favors parcels post and penny postage, and so does Postmaster General Hitchcock. It behooves every bee-keeper who lives where express companies and post-offices exist, to put his influence over against that of the express companies by writing his representatives and senators, asking them to support parcels post.

We may rest assured that the express companies will let their wishes be known to the legislators, and they will call attention to the taxes they pay. But just remember that the express

companies have nothing to talk o along this line, for they pay practically no taxes—they rent almost everything, and make their money out of a privilege to pillage, and not from service rendered. Why, the bee-keepers of the country pay more taxes, I'll wager, than the express companies.

Now 12 cents a pound, or 16 cents a pound, doesn't sound very cheap, but we can be sure that once the express companies are eliminated from the parcel-carrying business, the rates will be lowered to almost actual cost of carrying. This reduction has been the record of the Post-Office Department. In our town here we have a beautiful white brick post-office, built fire-proof, and one that will stand a thousand years, and before it is very much older I am satisfied that the work now done by the express companies will be done much more economically by the post-office force. The equipment is there; it belongs to the people, so why not use it? If the express companies can compete with the Government, why, then, let them. But we must be sure they do not receive favors from the railroads that the Post-Office does not also receive.

### Wild Flowers and No Honey—Queen-Mating Station

Twenty miles west of Boulder, and one mile above it, is the wild-flower paradise—56 distinct varieties, all in bloom, we found within a half mile of our mountain cabin, where we are rustivating for a week. There are probably several hundred flowers in this district from the first bloom in the spring to the last. White clover grows thick in the meadow lands of the mountain valleys, and sweet clover thrives wherever it has gotten a foothold. It blooms about August 1st, and all vegetation is correspondingly late, as we are 2 miles above sea-level, only 3 miles from perpetual snow, and freezes are common till nearly the middle of July.

#### QUEEN-MATING STATION

Wild bees are everywhere, but as yet I have been unable to find a honey-bee on any of the flowers. The season is so short that should a



## American Bee Journal

of, either, when running for extracted honey, and this "cut comb honey" would be very similar in hive manipulation to extracted-honey production.

### The Prolificness of Queens

The past spring was especially favorable to the spreading of brood, and in a good many cases eggs and young larvae were chilled, but the continual placing of empty comb in the center of the brood-nest kept the queens busy laying, and their number of eggs laid daily steadily increased as the season advanced. A queen cannot jump into heavy egg-laying all at once, and so I think I gained much by having the queens gaining gradually, even if half or two-thirds of their eggs were lost along at first. The case of a cow giving milk is probably similar; if you dry her up, or nearly so, you cannot get her back to former milk-production by any means.

For a week or two in early spring we may have very warm, nice weather, when the queen will go to work and get right into heavy egg-laying; then it turns cold, and she is shut off. Well, my practice was different. Twice a week I went around uncapping the honey and spreading brood, and I did this regardless of the prospective cool weather. The queens did not stop laying even in the cool weather, for there was empty available comb right in the brood-nest, and

the bees had uncapped honey which they could handle and place anywhere needed.

This plan might not pay everywhere, or every year in this locality, but it worked well this year. Of course, the amount of spreading of brood was determined by the size of the cluster of bees.

Dr. Miller, in *Gleanings in Bee Culture*, thinks few queens lay eggs that will not hatch. With Editor Root, I think he is wrong. He probably is right, speaking of his own apiary, but taking conditions here in the West, where practically no care is taken with the quality of the queens, I think a great many do not lay fertile eggs. Here it is a general practice to use cells whenever found, regardless of the quality of the bees, queen or size, and general good appearance of the cell. Most of the bee-men are too busy putting up sections, hives, and performing general apiary work, to do scientific queen-rearing, so that the queens are a nondescript lot.

When a hive is found with a bunch of cells, they are used in nuclei, and wherever the queens are manifestly inferior may be killed and a cell put in. Here in the West more dependence is placed upon the abundance of nectar than on the size and vigor of the colonies of bees. It is remarkable what yields some small clusters of bees will give, too.

ditions existing here, he can make a living at bee-keeping. Otherwise he can expect to succeed only slowly until he has mastered more of the situation.

Some writer on bee-culture recently struck a key-note when he said, "If you come South you will have to learn bee-keeping as it is here before you succeed."

The general facts relative to bee-keeping, such as the time required for a queen, a worker, or drone, to develop, remain the same; but when it comes to methods and conditions, it is far different. Therefore but few newcomers have ever succeeded in our borders at bee-keeping, and we can't say that it is a great bee-country.

Then, too, our average is low compared with that of the North, and more bees would have to be kept for a support, more capital invested, more labor required, etc. And summing up all the difficulties in the way, it is no great proposition, and returns only come after experience, and only then after "hard blows."

As to the best part of Georgia for bee-keeping, I would say that the Southern part might be best. But we have a lot of wild land here yet, and it would not be advisable to locate in a thickly-settled section, for the honey-flows are not as great and so frequent, because the forest is not so much protected from the fires, and the acreage of cotton is too small to give a flow.

## BEE-KEEPING IN DIXIE~

Conducted by J. J. WILDER, Cordele, Ga.

### An Expert Queen-Breeder Needed

Mr. Simpson, under "Caucasian Bees," uttered a truth when he said: "We need a queen-breeding expert."

We have a lot of good queen-breeders who are sending out queens that attain a high standard of excellence, but have we any who are settled down in dead earnest, striving to produce a better bee, or a strain more suited for our condition, regardless of color, etc.? If not, this is certainly a fertile field for such a breeder.

The most of our queen-breeders have been rearing queens for the Northern trade; therefore, but little has been done towards breeding for a more suitable strain here.

### Caucasian Bees

Mr. W. D. Simpson, of South Carolina, writes relative to these bees and their crosses:

I don't think I have given these bees and their crosses a fair trial. The queens I obtained were not purely mated, and they built a lot of brace-comb and almost closed the entrance of the hives with propolis; they built a lot of drone-comb,

and reared too many drones, and the crosses with the Italians were not so gentle, but they built up some faster in early spring, and those showing yellow bands did not propolize so badly.

I have found what Editor E. R. Root, yourself and others have said relative to the slow breeding of the Italians in early spring, to be true in my location. Now what is the South going to do for a better bee? You seem to think that the Caucasians and their crosses will be more suitable for us.

We need a queen-breeding expert here in the South to breed a bee that will suit us as well as the Italian bee does the Northern bee-keepers, and it might not take many years to accomplish this.

I note that you are mixing up bees considerably, and it may be a step in the right direction. Keep it up; we don't object to a mixture, just so we get results.

W. D. SIMPSON.

### Georgia as a Bee-Country

In reply to questions by A. M. Richards, of Massachusetts, I would say: A few bee-keepers in Georgia are enjoying as great prosperity as any others in the United States, but I can't say that it is a great bee-country. If a bee-keeper is perfectly familiar with surroundings and con-

### Bee-Keeping in Dixie

I wish to give some of my experience to illustrate the conditions and possibilities of bee-keeping in Dixie. I have as poor a location as there is in this State—so poor it is that the box-hive bee-keepers are becoming a thing of the past, as the bees are dying, mostly from starvation. They have no way of knowing the needs of the bees, or of improving them as honey-gatherers, until it is too late. I have had farmers hunt me up to sell me their bees in box-hives, and say that their bees were a nuisance to them, as they did not get any honey, and the bees were so cross they stung their other stock, and they had to sell them to me so low in price, that after the bees had been transferred to frame hives, the combs in the old box, when made into beeswax, would pay for the whole outfit. The wax is all that is to be expected from a box-hive colony. Let the bees transfer the honey, if they have any, in the box-hive to the movable-frame hive. The average per colony is about 50 pounds of honey.

The demand for honey here is never supplied. It sells in the comb at 12½ cents per pound, and extracted honey at 8½ cents, wholesale, on board the cars here.

I have several out bee-yards, in all more than 200 colonies. I do all the work myself, except packing the honey, which my wife does. I have two other businesses besides bee-keeping, but I think I will take the advice of Mr. Hutchinson and remove one of these props, and "keep more bees."

I know of nothing for a poor man here, that will pay as well as bee-keeping, taking into consideration the capital, time, and the repairs involved; but I wish to say the best bees should be secured to

# American Bee Journal

start with, and stock all one's bee-yards with young queens of this stock.

A neighbor bee-keeper visited me a short time ago and after he had looked over some of the colonies he said, "You must certainly have a better location than I have, as I have very few colonies that are equal to your poorest, in storing honey." But after he had visited several out-yards, and saw the location generally, he said, "I am convinced that it is not the location, but the *race* of bees, and the *man or management*," which I am sure is correct. The race of bees, and the management, are the only things that will ever revive bee-keeping in Dixie. What we need is better bee-keepers. One movable-frame hive with the proper bees and management, will give as much returns as 10 box-hive colonies. Can't we improve?

JOHN W. CASH.

Bogart, Ga., June 19.

## The Sectional Hive

Mr. Wilder:—Have you ever had any experience with the sectional hive? I have one I have been using for 4 seasons, made up of shallow extracting supers, and the colony in this hive has given me more surplus honey than any of the others with regular full-depth, Langstroth frames, and it swarms two or three times each year.

The brood-chamber in each hive is chock-full of honey. What can I do to give the queen more room?

Also, what kind of bees do you think best for the South? W. B. BRADLEY.

Branford, Fla.

Ans.—I have been using some sectional hives for years, but don't like them as well as I do a regular full-depth one-story hive with shallow extracting supers on top and storing supers added. The hive and super give me an ideal brood-chamber, but such arrangement will admit of no rapid manipulation.

It may be that this particular hive has the best queen. Surely it has if it is the most populous. One hive would not be a fair test, anyway. Try more. You should have a honey-extractor if you haven't more than 8 or 10 colonies of bees, and keep the honey extracted from the brood-chamber until the close of the last honey-flow, then let the bees store enough there for winter.

For best results, the outside of combs should be extracted as soon as sealed, and inserted in the middle of the brood-chamber. This will keep up bee-production, will greatly increase honey-production, and perhaps enough in one season to pay for the extractor. It might help your stock of bees if you would add some Caucasian blood. If you have black bees, add both Caucasian and Italian blood by purchasing a few queens of each variety.

## Apiarian News and Reports

Mr. Edward Geesa, of Idaho, has recently located on the Suwanee river in Florida, engaging exclusively in bee-keeping. He is located near the mouth of the river, and will operate apiaries along its banks and on the immediate islands along the Gulf of Mexico.

Mr. A. S. Osha, also of Idaho, has recently located near Minopolis, Ala.,

in the Black regions where the clovers are abundant, and will engage exclusively in bee-keeping.

Mr. Frank Bradburn, of Indiana, will soon reach Dixie, bee-prospecting.

### A SMALL BUNCH OF BRIEF REPORTS.

My bees are rolling in nectar from the cotton-fields. CLARENCE ELLISON.

Belton, S. C.

The flow from cotton is on, and is heavy. JOHN W. CASH.

Bogart, Ga., July 30.

The flow from partridge-peas is not very heavy, owing to unfavorable weather conditions. If the continued rains will

stay for a few days, we may get an average crop. R. W. HERLONG.

Ft. White, Fla.

Bees have not done much in this immediate section this season.

Talking Rock, Ga.

T. S. HALL.

My bees never did much in the spring, but are doing well on the flow from cotton. W. D. SIMPSON.

Anderson, S. C.

I learn that the flow from clover in Alabama was very good this season, and the flow from cotton has been far better than any previous season in Georgia, and more than an average crop will be stored in the cotton-belt.

## SOUTHERN



## BEEDOM~

Conducted by LOUIS H. SCHOLI, New Braunfels, Tex.

### Space Between Old Combs

Will the discussions on the question as to whether old combs ever get so old that the cells will be too small for rearing brood in them satisfactorily come to an end? I think not, so long as the question is not settled, and from the stand taken by some of the veterans, both pro and con, this is not a settled question, by any means.

More than a year ago I took issue with Dr. Miller, in "Gleanings," about the size of the cells in one of the oldest combs that I had in my home apiary. The way I discovered it was by finding some of the bees so small that they were only one-half as large as the normal-size bees of the colony. An examination of the combs revealed the fact that the cells of the old and much-used brood-comb had become so small and short in depth that the bees that were hatching from them were only slightly larger than some of the species of our medium-size flies. So marked was the contrast between the normal-size bees and the dwarfs that it could hardly be possible that they should all be the product of the same mother. The dwarfs were the neatest little bees I have ever seen—so much smaller than the others, and yet as perfect as their larger sisters. They were not abnormal or mis-shaped in size or shape in any way.

I wish the readers to understand that I am not exaggerating in the least, as some might suppose. I have made some drawings of the cells of a part of the comb from which these small bees have hatched, but on account of lack of time I have never finished them in ink. As soon as I can do so I will have them prepared for publication.

I have gone further. After making cross-sections of the comb and dissolving the hard excrementitious matter which held the cocoons together, in alcohol, careful dissections revealed an accumulation of as many as 20 cocoons in a single cell. The increase in thickness of the bottom of the cell was from one-sixteenth to seven-thirty seconds of an inch from one side of the septum of the center of the comb. Besides

this, the cell-walls were much smaller near the bottom of the cells, tapering to a thinner wall toward the mouth or opening of the cells. It becomes apparent at once, therefore, that the cavities in the cells must have become very much smaller with the age of the comb, and hence the resultant small-sized bees that hatched from these cells.

If we figure that the combs are spaced the regular width— $1\frac{3}{8}$  from center to center, which is strictly adhered to in our apiaries since self-spacing frames are used—there is little chance for the bees to elongate the cells to any great extent, as some predict the bees will do. The case in question is such a conclusive one with me that I know that the bees can not do this with regular-spaced combs. And the argument that they would do so if the combs were spaced farther apart does not count for anything, for the simple reason that I do not do things that way, *i. e.*, hunt up the old combs and space them farther apart for this special purpose. Especially is this true if I use only self-spacing frames, as I do in all my apiaries.

It is difficult to estimate how old this comb was. It was one that was purchased with some of my first bees in 1893, or 18 years ago. The previous owner began bee-keeping in the early '80's, but I do not know when the bees first built out this particular comb. It was built in one of the very early types of Hoffman self-spacing frames, however, with the top-bars wider at their ends. The hives from which the bees were taken at that time were very old and dilapidated—the reason why I did not purchase them with the bees on the combs.

This is such strong evidence, however, that brood-combs may become too old for brood-rearing, and that the cells will become shorter considerably by the accumulation of the cocoons and the excrementitious matter, which is not removed entirely after the young bees have hatched from the cells. The cell-walls are also made smaller by the increased number of the cell-wall linings of cocoons, although the decrease



is not so great toward the mouth of the cells. And as the bees are not able to elongate the cells to any great ex-

tent when the combs are spaced the regular way, the result is smaller size bees if they are reared in these cells.

## CONTRIBUTED ARTICLES~

### Disposing of the Honey Crop

BY C. P. DADANT.

The honey crop appears to be small throughout the country, and some readers may think it is unnecessary to give advice as to the disposal of it under such circumstances. It is, however, at such times as this that the apiarist ought to realize the biggest possible price from his product. He cannot succeed in doing this unless he goes as it in a practical way.

Discussions at the convention of the Chicago-Northwestern Bee-Keepers' Association last December demonstrate the fact that in many cases the bee-keeper gets only half of the price at which the honey is retailed by the middleman, and in some cases only one-third of that amount. Many articles, especially luxuries, cost as much to retail out as to produce. Even fruit, when retailed, has often brought to the two or three persons who handle it, more than the total that the producer gets. We raise grapes here in large quantities. We have often sold grapes at 1½ to 2 cents per pound at wholesale, which retailed in our own vicinity at 4 cents, when we were too busy to sell them ourselves.

But grapes and other fruit are perishable goods. When they are once picked, they must be sold. Not so with honey. You may store away your honey and sell it at leisure. Moreover, it sells better late in the season, about the holidays, than just after the crop, for sweets are used more especially in cold weather. So there is no hurry to sell our honey, unless we want to ship it to a large center to be parceled out by others.

Shipping our crop away, instead of retailing it in our vicinity, is responsible for the low prices at which the honey often sells. The man who has ten thousand pounds of honey must ship some of it away. But the man who produces a few hundred pounds each year is the one who gluts the markets, because his name is "legion," and too often he makes not the least attempt at finding customers among the consumers.

Five hundred pounds of honey put up in retailing packages—jars or cans—after changing hands two or three times, must sell at about 16 or 18, or perhaps 20 cents per pound, in order to be sufficiently profitable to each person. This augmentation of value—from the producer's original price of 8 to 10 cents—has a very positive tendency to decrease

the sales. Consumers who would readily pay 12 to 15 cents per pound for a choice article may pass over it at a glance when the increase is so large. Honey, being a sweet, must be to a certain extent controlled in its price by the value of other sweets. Our action in putting the crop of honey in the hands of the commission men, who must in their turn sell to wholesalers who will re-ship it to our neighboring grocer, tends to reduce the sales by reason of the increase in cost.

A housekeeper who hesitates to put 20 cents in a glass jar containing a single pound of honey, might readily buy from the producer a 10-pound can at a little over half the price per pound—say 12 cents. The producer who gets 8 cents per pound, in bulk, for his honey, shipped to a large city, would net over 10 cents per pound for the same honey sold to his neighbor, and the amount consumed ultimately would probably be doubled, thus increasing the demand largely, and creating a taste for the product instead of canceling it, or frightening it away.

As I have said before, the honey which we produce does not need to be disposed of at once. If we are too busy in August and September to offer our crop, it is as well, for the best selling time is around the holidays. When the bees are put away comfortably, with plenty of stores, it is the proper time to offer our crop.

You will say that you are not a peddler, and do not wish to run around with your goods. It is not at all necessary to peddle. Carrying honey around in order to sell it is the worst possible method. We sell by sample, always, and never haul honey about unless it is already sold. There is all the difference in the world between carrying cans of honey about, trying to get rid of them, and taking an order from the consumer while delivering goods already sold. Nothing is more likely to create a demand than to be able to answer, when a question is asked about the price of the goods you are hauling: "These goods are sold on orders, but I can bring you some of exactly the same quality, and at the same price, if you desire it. I produce this honey myself, and guarantee it positively as of best quality, and entirely pure."

Another thing which we must all learn to do is to put a price on our product, instead of going to the corner grocery and ask them how much they will pay. The grocer is

by nature always apprehensive when offered a product, the price of which the grocer is not able to set. He has so often bought eggs or butter at a certain price from one man, and succeeded in getting the next lot for 2 or 3 cents less that he is, especially with as rare a product as honey, likely to suspect that to-morrow some one may come who will be willing to sell at any price he may offer. It is those who do not know what to expect for their honey who will kill prices. If you have posted yourself on the conditions of the crop elsewhere, you must be able to figure what is a fair, sufficient price for your goods. Set that price, and do not deviate from it. Place a small margin between the price to your grocer and the price to the actual consumer, allowing the grocer from 10 to 20 percent between the two. Then hold to these prices. The grocer may laugh at you the first year, when you set your price, but if you persevere, he will soon find out that he has to come to you, because your prices will be less than those of the wholesale houses who buy from the commission merchant.

After two or three years your grocer will have a *real regard* for your price. He will be guided by it. By and by, if you continue as I have done, for years, the grocer will order honey from you, if he knows he can trust you, without any discussion as to prices. He will only ask what you expect to get at retail, and will be ruled by this price. If he finds a cheap lot, from some bee-keeper who does not read the American Bee Journal, and who does not know what the price is, your grocer will be very careful to keep that bargain to himself, knowing full well by that time that if he has succeeded in getting ahead of somebody, that does not constitute the real prices.

Above all things, do not imagine that your selling at home will injure the business of the jobber or of the commission man. They will find plenty of honey to handle, and your keeping away from the big market will only cause a more lively market, better sales in the cities, and better returns all around, for you will have created a demand which otherwise would have been killed.

I only wish that I could convince every one of my readers of the truth of this assertion, that *his home sales, at a more remunerative price than he can get otherwise, will positively raise prices*. What can one man do to raise prices? Oh, so little! Yes, but it is the single voters who carry the elections to the one party or to the other, and if each of us stayed at home, under the plea that our one vote will make no difference in the general result, where would the Republic go?

Conclusion: If you want to see honey prices more firm, try home sales; not one time, but every year, regularly, with a sufficient addition to the price you would secure to pay you amply for the extra labor, and you will be astonished, in a few

# American Bee Journal

years, with the result achieved. This is not idle talk; it is my own experience, acquired from a practice of considerably over 40 years.

Hamilton, Ill.

## Bee-Paralysis—A Queer Disease

BY G. M. DOOLITTLE.

"I see by reading the columns of the American Bee Journal that you sometimes answer questions for those who do not know very much about bees. Now I want some light regarding what ails my bees. During the early part of the season they were prosperous, but as the harvest of nectar arrived a part of the colonies seemed to be ailing from something which I have never seen before. At some of the hives many bees seemed to be bloated, and would shake as if they had the ague, while quite a few of them seemed to be devoid of any hair, being smooth and shiny. Then other bees seemed to be pulling at them, and would drag them to the edge of the alighting-board and dump them off, until in front of some of the hives the bees lie dead in heaps. There seems to be the usual quantity of brood in these hives, but the bees are apparently dying off faster than they are supplanted by the emerging brood. The colonies thus affected have not given half the crop of honey that have those not showing these symptoms. Can you tell the readers of the American Bee Journal what the trouble is, and what to do for it?"—CORRESPONDENT.

From the description given, I think there is little doubt but what these bees have what was termed 30 to 35 years ago "The Nameless Bee-Disease," but what has been known since then as "Bee-Paralysis."

This disease was quite common in the latter eighties, and for a time it made rapid strides till there were very few apiarists who were not familiar with it, either in their own apiary or in that of some one near them; during the nineties very many apiaries were nearly destroyed through so many bees dying off that there were not enough bees left for winter, it being much more prevalent and disastrous in the South than here at the North. What caused this trouble was the great question in the minds of all who had it in their apiaries, for where the cause of any disease can be fully understood, a remedy is generally soon found. But unless I have been careless in my reading, no one seems to be sure that he knows what the cause is. Some were quite positive for a while that they had the secret, but as the years rolled by, time proved that such were only ideas or guesses in the matter, and I doubt whether there is any more known to-day as to the cause of this plague of the bees than was known when it was first called the "Nameless Bee-Disease."

But I am pleased to record that, since the ushering in of the Twentieth Century, the disease has been on the wane, not only as to the number of colonies having it, but those affected by it have it so lightly that we hear very little of the matter at this time. As to what to do for it is a matter very largely of guess-

work. When the disease first made its appearance, some of the "knowing ones" told us the whole trouble came from not letting the bees have access to salt, and from this it was said that, if a strong brine was made and sprinkled over the bees and combs, it was a certain cure. I jotted this down in my reference book, and, when, in the early nineties, I had 2 colonies that were affected by it, I tried this remedy. Meantime others had been trying it, but it was soon apparent that it was of no use as a general remedy. As occasionally a colony would quite suddenly get well of itself, it so came about that one which would naturally do so when treated with the brine, became free from the disease a little later, when, of course, it was rushed into print, or told "on the housetop," about the wonderful cure with a simple brine, like that used for preserving meat!

Soon after the brine cure, came that of giving such diseased colonies a young prolific queen. The argument along this line was, that from some reason the mother queen had contracted the disease, and therefore the eggs which she laid contained germs, which later on developed sufficiently in her progeny to cause the trouble. Therefore, if the old queen was killed and a young, vigorous one given in her place, then, as soon as the bees emerging from the eggs of the new queen came on the stage of action, the disease would begin to grow less and less; and when all the bees from the original queen had died, the colony would be free from the disease. As this looked reasonable, it was tried more largely than any other remedy; but after a thorough trial of the same by hundreds, if not by thousands, it was found that, in the majority of cases, such change had no effect whatever.

One year, in July, I found 8 or 10 of my colonies in quite a similar condition to those described by our correspondent, although only one colony was extremely bad. I gave this colony a new queen, after killing the old one, and as fall drew on, it got better, and I was quite enthusiastic in the matter, although I had noticed that diseased colonies which lived through till fall, generally got better at that time.

The next year I had a colony come down with this disease still earlier in the season (in June, I think). This colony was the worst of any I had ever known, and to test the matter fully, I took their queen away and gave her to a healthy colony, giving the one from the healthy colony to the diseased one. The result this time was that the colony to which I gave the diseased queen went right on in a prosperous condition, with no signs of the disease, while the diseased colony showed no abatement of the disease, becoming so weakened in the late summer that it was united with another colony, the united colony never showing any signs of the disease afterward.

The next year, when the bees were

put from the cellar, another colony was set on the stand where this worst one I ever had, had been the year before, and, to my surprise, this colony took the disease in early July, and, for a time, every colony placed on this stand took the disease during the summer. This led me to believe that location had something to do with the matter, or that the trouble came from some infection that arose from the ground in certain places. But, after a few years the colonies put on this stand were all right, and one near the opposite side of the apiary contracted the disease.

From all of these different experiences I was forced to the conclusion that nothing definite is known about this trouble. Therefore, so far as I know, the "what to do for it" still remains an unanswered problem.

I have seen very little of this trouble since the nineties went out. One colony had a few bees diseased, with swollen, shiny abdomens, and shaking motions, in 1900, and that is the last I have seen anything of it in my apiaries. There was a time when beekeepers quite generally believed that this disease would ruin our pursuit; but as I have heard of, or seen, very little in print regarding the matter for some years now, I think we have little need to worry. It is well, however, to bear in mind that such a disease exists, so that we will not be taken unawares should it visit our apiary.

Borodino, N. Y.

## Bee-Keeping in Jamaica

BY W. C. MORRIS.

Apiculture is carried on in an extensive scale in Jamaica. D. Foster, at Old Harbor, has some 2000 colonies, and F. A. Hooper has over 1000 in 5 yards, and the American Bee-Products Co., a corporation of New York City, has started their first yard, and expect to increase to 50,000 colonies. Most of the bee-keepers of the Island carry on the business in a careless way, using kerosene cases for hives, supers, covers and bottoms. These cases are the same as our two 5-gallon-can boxes, made of ¼-inch stuff, and the rains and excessive heat of the sun warp and twist them until there is little or no protection for the bees; and if they get a 50-pound average, they consider they are doing well. They receive about 4 cents a pound for their honey.

With bees properly housed and looked after as they are in Canada and the United States, there is no reason why an average of 200 pounds or more can not be had.

The bee-supply business in Jamaica consists chiefly of selling frames.

There are several up-to-date apiarists in the Island, and while I was there one of them was on a pleasure trip to Europe, which proves there is big money in bees in Jamaica, if properly taken care of.

Mr. Hooper is one of the oldest beekeepers on the Island, and claims to be the one who introduced Italians into





NO. 1.—HOME OF MR. HOOPER, IN KINGSTON, JAMAICA.



NO. 2.—BARBRICAN APIARY OF MR. HOOPER.



NO. 3.—NATIVE WOMEN OF JAMAICA.

the Island. He has written a book on "Bee-Keeping in Jamaica."

Number 1 shown here is a picture of his home, with Mr. Hooper and his two daughters and grand-daughter on the porch.

Number 2 is a picture of his Barbican yard, and his son.

Number 3 shows some of the native women on their way home from market. This help can be had for making comb foundation, putting together and wiring frames, and help in extracting, for 18 cents a day. Men receive for piece work from one to one and one-half shillings (25 to 30 cents) a day, but they are not dependable help; but the women are good workers, and in most instances the success of the home depends upon their efforts.

Jamaica is free from bee-disease, with the exception of some paralysis. No foul brood is in the Island, and they allow no bees to be brought in, and queens are transferred to other cages on the boat they come over in, by the bee-inspector of the Island, Mr. C. N. Eddowes, one of the most advanced apiarists on the Island. No charge is made; it is not a question of graft, but of protection.

The Department of Agriculture has a class in apiculture at the Hope Gardens, under the direction of Mr. Eddowes.

Most of the honey produced is extracted, and is exported to England and Germany, and the producer receives 60 cents a gallon. The principal source is the flowers of hardwood trees, and the largest crop is from logwood, which is a water-white honey, and resembles in flavor and color our clover. It is also of good body.

A temperature of 60 degrees is about as low as the thermometer reaches in the lowlands; you can get it as cool as 40 degrees in the mountains in winter.

There are big possibilities for capital in Jamaica in bees, sugar, bananas, pine-apples, coffee, and all kinds of tropical fruit. A steamer leaves the Island nearly every day for the United States. There are three companies—Hamburgh - American, Royal Packet, and United Fruit Co. There are cheap freight-rates—about 50 cents for 100 pounds, for 5 days' trip.

The scenic beauty of Jamaica is unsurpassed anywhere.

## A Few Apiarian Suggestions

*Read at the Northern Michigan Convention*

BY E. D. TOWNSEND.

It is with a great pleasure, that I have this opportunity of meeting with you again at our annual convention, and without more preliminary, I will suggest some things that can well be taken up at this, our annual meeting, for discussion and consideration.

### BEE-DISEASE LEGISLATION.

The first I will touch upon, and is likely the most important at this particular time, is some bee-disease legislation we want and are trying to get passed during the present term of our Legislature.

It is a fact that 37 counties in lower Michigan have foul brood within their borders; 3 have European, and

# American Bee Journal

I understand all 37 have American foul brood. Then there are the counties not reported, so I think it would be a conservative estimate to say there is foul brood in three-fourths of the counties in lower Michigan.

As you all well know, we have but \$500 per annum and one inspector of apiaries, at our service, as the law now allows. It is evident that foul brood has the start of us, under the present condition of things. In our new Bill, that we hope to have made into a law this winter, we are asking for \$1500, and the privilege of having several inspectors of apiaries appointed. Now, if we succeed in getting this Bill passed, it will be because we all urge our senators and representatives now in Lansing, to support this Bill, and if there is a single bee-keeper in attendance who has not written his representative, in regard to this bill, he, or she, is earnestly requested to do so immediately, as the Bill is likely to be voted upon in the near future. I have a list with me of the representatives of each county, and if you have not already written, and do not know just how to address your letter, this circular will explain.

## THE SALE OF HONEY.

Another point I wish to touch upon is the sale of honey. How many present sell your honey to some one who re-sells in original packages? To illustrate: Wouldn't you feel rather cheap, were you to sell your extracted honey in 60-pound cans—say, to Jones, across the way from you—for say 8 cents per pound, and find out a few days later that Jones had re-sold this same honey for 9 cents a pound, and had hardly turned his hand over, or in other words, had exerted but little to make a dollar per hundred pounds on your whole crop? If the crop was but 4,000 pounds, he realized the handsome profit of \$40. If you could learn, by attending this convention, how to have that \$40—not during one season, or on one crop, but for always—wouldn't you feel well paid for the little time and expense this convention-trip has cost you? I think you would.

I have practiced the saving of this cent a pound on my crop of extracted honey for years, and it is a wonder to me why so many do not take advantage of this way of selling, that I am about to explain. It's very simple: *Just sell to Jones' customer.* Simple, isn't it! Still, many will be tempted to job their honey in a lump, at a less price, and paying the freight in most cases, for the jobber is "on his job," and usually includes the "freight paid," when he quotes you a price.

Lest I should forget it, I would say here, that if a dealer quotes me a price on my honey—a privilege he has no right to—I ignore the offer and go ahead and quote him my price, and it is always f. o. b. my shipping-point.

To work this plan successfully, one will need some sample mailing blocks, which all bee-supply dealers furnish.

Then one will have to do a little advertising—not so very much, though; and this brings me to the main point:

## ADVERTISING THE HONEY CROP.

This cannot be done better than to pay one dollar to join the Michigan State Bee-Keepers' Association. This Association issues a booklet, annually, giving the names of all its members and the kind of honey the individual produces. Then this booklet is advertised through all three of the bee-papers, and in this way each member is brought in contact with many dealers and bottlers. Then our secretary has a list of over 100 dealers in honey, and this list is free to the members. And last, but not least, along in July, an Advisory Board of three members look up the prospects, or, in other words, estimate about what the honey crop will be, and decide upon the price our members ought not sell under. Notice there is no restriction as to how much more you can get for your honey, but it gives the members a very good idea of the minimum price to ask for their honey crop. This feature of the State Association, is, in itself, sufficient to repay one for the dollar it costs annually.

It would be a great pleasure to me to see every one of those present, when renewing your annual dues to this Association, to include a dollar for a year's membership in the State Association. You are all cordially invited to become members of the State Association.

## SOMETHING ABOUT BEE-HIVES.

I can hardly resist the temptation, before closing, to say something about bee-hives; and if you will bear with me for a few minutes longer, I will satisfy that desire. In the first place, I would earnestly advise that no one should try to invent a wonderful bee-hive until he, or she, has been in the business for at least 10 years. I know this is a long time to wait, but I assure you that, after an experience of 36 years in the bee-yard, it will not pay you to try to invent a hive. Don't do it. How many times one is tempted to invent something along the line of a hive, or contrivance pertaining to our beloved pursuit, but to find out later that this same thing has been tried out and discarded long ago! Then we realize that we have lost time and money, for no one wants odd-size hives and contraptions.

I would advise all to adopt the Langstroth frame. I would also advise you to use 10 of these frames in a hive, for either comb or extracted honey production. If you cannot make yourself believe this is the best size of hive, use more or less number of these same frames, then, any time you may decide that your hive is either too large or small, use more or less frames, and you will never regret it.

There is no other hive used at the present time that affords so many good points as the Langstroth hive. The brood-chamber is not so shallow but the bees breed up in it very well;

then the frame is not so deep but that it works well as an upper story, to extract from. A great point in adopting a hive or frame is to have it *standard*. If one wants to buy or sell bees, or in the case of supplies, it is much better and more convenient if the frames are of the Langstroth dimensions.

After saying all the foregoing, I'm tempted again. This time I want to say that it matters but little about the hive, any way, only as far as it is convenient to have hives all alike for convenience in handling. It has often been said, and it is true, that bees will store just as much honey in a sugar-barrel as in the best hive.

Along this line I would refer you to the Manleys, of Sanilac County. Each spring they buy up all the bees they can, "in any old kind of hive," and harvest per colony about 100 pounds of extracted honey, per annum, from them. Does any one think they could do better with the very latest, well-painted hive? I think they would not.

*It's the man*, not the hive, that produces tons of honey, annually. "You cannot know too much about your business" is as true today as ever. If you are not getting good, fair crops of honey—as good, or better than your neighbor, who is in close proximity to you—do not lay it to your hives or location. In other words, use your brains; they will help you out, take my word for it. Don't invent a new hive, for it won't help you any.

## OUR CURRENT BEE-LITERATURE

This brings forth the subject of reading matter. We have three good papers. Every progressive bee-keeper should subscribe for all of them. The American Bee Journal is especially fitted for the beginner; also for convention reports and general reading matter. The Bee-Keepers' Review is more particularly adapted to the specialist or more advanced bee-keeper, while Gleanings in Bee-Culture takes the middle ground. It will be seen that it is necessary to take them all if one is to keep well informed along all lines. I recommend that all of you who do not now take these 3 bee-papers, subscribe for them, for it will pay you well.

## THE NATIONAL ASSOCIATION.

I realize that I am tiring you, but there is just one more matter to which I would call your attention, and that is the National Bee-Keepers' Association. It deserves our support. It is doing considerable for us, and is now considering the doing of *much more*. In the near future the members of the National will probably have an opportunity to vote upon an amendment to its Constitution. This amendment will provide that State or local association may become auxiliaries of the National. I had thought along the line of several associations in the State, something like New York State. If we had say 3 conventions in this State, their several dates could conform so that we could likely have speakers



# American Bee Journal

from abroad, or attractions, so that all would be interested, or more so than at present. Whether this new move would help us, or we help the National, I cannot say, but likely the benefit would be mutual.

I hope this association will join the National, in a body—this year, especially—as it would be to our advantage should the suggested feature of the National carry.  
Remus, Mich.

## DR. MILLER'S



## ANSWERS~

Send Questions either to the office of the American Bee Journal or direct to  
DR. C. C. MILLER, MARENGO, ILL.  
He does NOT answer bee-keeping questions by mail.

### Different Kinds of Buckwheat

Is there any difference in buckwheat? I have planted it twice in my garden for a cover crop after early vegetables had grown, so that my bees would have something to work on late. It blossomed fine both times, but has no sweet smell whatever, and the bees do not work on it. I remember when I was a boy up in Wisconsin, we could smell a buckwheat field a mile, and the bees were crazy after it.

ILLINOIS.

ANSWER.—Yes, there are different kinds of buckwheat. The Japanese was boomed greatly with its large grains, but nowadays it seems to have fallen into disrepute. The Silver-hull is in good repute, and perhaps there is no kind better for the bees than just plain buckwheat. Like enough, however, the trouble in your case is not with the kind. Buckwheat does not always yield nectar, and somehow it seems to be less reliable than in former years, but that may be only a notion. The locality, too, may have something to do in the case. Some soils seem to be just right and others not.

### Growing Sweet Clover

1. Please give me directions for growing sweet clover.

2. I have 40 acres of rocky land. I have plenty of water to irrigate the land in the winter season, but would not have much to spare in summer. Does the sweet clover require much water?

3. How many pounds of seed will it take to the acre? Will it make as much or more than alfalfa seed?

NEW MEXICO.

ANSWERS.—1. It needs about the same cultivation as alfalfa, although here it seems to do well on the hardest kind of ground on the roadside, where the seed is tramped in. In soft and nicely prepared ground it kills out badly in winter from heaving. It may be that it would not do so with you.

2. Like all other plants, it must have moisture, but will grow with perhaps less than most other plants.

3. Use about the same amount as of alfalfa. Indeed, if you should by mistake sow sweet clover in place of alfalfa, you might hardly know the difference the first year, but the second year there is much difference in appearance. Unlike alfalfa, sweet clover dies root and branch in or before the second winter.

### Double 8-Frame Hives

I am using the 8-frame hive with supers the same size as the hive for extracted honey. When I put on the supers I took one frame out of the brood-nest and put in the super to get them to start in it. This plan worked fine as far as getting them to work. But what did the queen do? She just made the whole busi-

ness into a brood-nest. How would it be to get queens for those supers, and take them away and make them into brood-chambers? I would like a good stock of bees for another season. Would I need to take them away some distance to prevent them from coming back to the same hive?

NEW MEXICO.

ANSWER.—Yes, you can make a new colony, and without taking the bees far away. If you do nothing but to move the super to a new place 10 feet away, or farther, you may have good success. But it is somewhat a matter of chance as to the kind of queen you will have. By taking a little pains you can be more sure of having a good queen. The best kind of queen is not reared in a weak, discouraged colony. When you move that super to a new place, all the field-bees will return to the old colony, and if the queen is left in the old hive the bees in the super will not be in the best heart to rear a queen. When you move the super to the new stand, if you crowd grass or green leaves into the entrance so that no bees can return for a day or two, the super will not be so much depleted of bees. You may take a still better course. See that the queen is put on the new stand. That will leave the part on the old stand the queenless one, with abundance of bees and honey coming in, and they will be in good heart to rear a queen. If you leave them without any further attention, a swarm may issue in 12 days or so, and if you are anxious for increase that will be all right, but there is some danger that the bees will be too weak for winter in one of the hives. If you do not want them to swarm, 10 days after the division let the two hives swap places. The bees will do the rest.

### European Foul Brood—Carniolan Bees and Foul Brood

1. Black or European foul brood is in every apiary in my locality, and as we never had it before, we thought it chilled brood, on account of the cold, backward spring, and more than 50 percent of the bees were lost. We are now making a concentrated effort to eradicate the disease by Dr. Miller's plan. We would like to know about his latest experience with this disease.

2. I am requeening my entire apiary with Carniolan queens, as I have come to the conclusion that the most prolific bees are the most resistant to foul brood, and in this I believe I am backed up by Mr. Ralph Benton. How about it?

CALIFORNIA.

ANSWERS.—1. You will find this year's experience given on another page of this number.

2. There is a very general belief that the introduction of pure Italian blood is an important step toward the eradication of European foul brood and some may

think the same of Carniolans. It may be that there is something about Italians or some other blood through which it comes to pass that if two colonies side by side are of equal energy, one of them being of pure Italian blood and the other mostly black, the one of pure Italian blood will be the more nearly immune to foul brood. But I doubt it. I think it is true that, as a general rule, Italians will fight foul brood better than blacks, not because they are Italians, but because they are more energetic than the others. So I suspect it will be found that the most energetic bees, no matter what the kind, will be the ones that will do the most toward keeping down foul brood. I do not remember seeing prolificness claimed as a thing to help against foul brood. Yet prolificness helps toward it in one respect, that it helps to keep strong colonies, and it is very important with European foul brood that colonies be strong.

### Stores for Winter—Extracting-Supers

1. In preparing bees for winter, would it be best to leave the hive full of honey, or leave some empty combs for brood?

2. Do deep hive-bodies do as well as supers

TEXAS.

ANSWERS.—1. Don't you worry about room for brood. The best you can do at getting the brood-chamber filled with honey, no doubt there will be by spring plenty of room for brood, and the bees need no room for brood late in the fall. Some, however, think it better for them to have some empty cells to cluster on in winter, but they will have these emptied out in good time.

2. As well as supers for what? Perhaps you mean for extracting purposes. There is very little difference between having shallow frames for extracting, and having them the same as the frames in the brood-chamber.

### Empty Combs for Swarms—Sowing Sweet Clover Seed

1. Do you consider it all right to give empty comb to a newly-hived swarm?

2. Will the queen start laying in empty comb when given the new swarm?

3. I have 2 or 3 colonies which have not made any headway, on account of the dry spell. Do you think it is all right to give them combs with honey and some empty combs?

4. What time of the year do you think is best to sow sweet clover?

IOWA.

ANSWERS.—1. Yes.

2. Yes, if the combs are in good condition she will begin laying sooner than if empty frames or only foundation are given. If the combs are in such bad condition that it takes the bees a good while to clean up, she may be slower at laying than if empty frames were given.

3. I'm not sure that I see just what you are driving at in your third question, but in any case it can hardly be wrong to give such combs to colonies that are doing little. It may be that you want the combs taken care of; and there is nothing better than to give them to the bees. Or, your scheme may be to put them on the hives ready to be filled with honey if a good fall flow comes, and that would be all right.

4. Almost any time will do, but perhaps there is no better time than in the spring, at the time when farmers sow other clover-seed.

### Clogged Brood-Chambers, and No Super-Work

"Why don't bees go into supers?"  
Brood-chambers are clogged with brood

# American Bee Journal

and honey, and "nothing doing" in the supers. Advice given is to uncapp the honey in the brood-chamber. Most of the sections have bait-comb in them. I have no uncapper, so I have run a hook over the capped honey and considerably disturbed it. Now, how about being as sure as possible that in these hives with clogging-up brood-frames (with honey) there will be enough bees growing in September or August so as to have the colonies winter all right? Is there such trouble in producing extracted honey? What would I better do?

PENNSYLVANIA.

ANSWER.—Running a hook over the sealed surface ought to have somewhat the same effect as uncapping, but is probably not so good. If you have no regular uncapping-knife, a common butcher-knife will do fairly good work. When the surface has merely been scratched I have known the bees to repair the capping, not taking up any of the honey. But if the knife cuts down to the honey, they are bound to take up some of the honey before they can do anything at repairing the capping, and if everything is full below they are to a certain extent compelled to deposit the honey above.

If a good fall flow comes, that may start an increase of brood-rearing, and the bees may empty some of the honey from the brood-chamber into the super. If no fall flow comes, there is danger, as you suggest, that brood-rearing will be so limited that the colony will not be so strong for winter. Yet there is this crumb of comfort in the case, that if there is nothing for the bees to do in the field they will not grow old so rapidly, and will not die off so fast, so that, after all, they may not be so very weak for winter.

With extracting-combs there is less inclination to cram the brood-chamber, yet if the bait-sections be as fully drawn out as the extracting-combs the difference should be very little, unless it be that extracting-combs that have been used as brood-combs have greater attraction for the bees than a comb that has never had anything but honey in it.

## Bees Bothering Watering-Trough—Insuring Bees—Amount of Stores for Winter

1. We have an apiary where an irrigating ditch runs right along in front of the hives, but the bees go over to our neighbor's, about 80 rods away, and get water from their watering-trough, and they annoy them very much as the stock can hardly get any water to drink on account of the bees. What could we do to help out our neighbor?

2. Is there any fire insurance company that will insure bees in Arizona? We use brush sheds for shade.

3. How many frames of honey of the Hoffman size should I leave in the upper super, to winter on? I did not take out any honey below this year.

ARIZONA.

ANSWERS.—1. When the bees have formed the habit of going to a certain place for water, it is a very hard thing to get them to change to some other place. If the trough is not too large, it may be covered up by boards, sheets, or otherwise, opening it only at certain times in the day to let the stock drink. After a few days the bees will give it up. Possibly you may be able to make the place offensive for bees while still all right for the four-footers. Put the carbolic acid or kerosene on the edges of the trough where the bees stand to get the water. Of course there is the danger that in doing this you will get some of the stuff in the water, so the stock will not drink it.

As in so many other things, prevention is better than cure. In the spring,

when bees first begin to get water, do all you can to prevent their getting a start in the wrong place, and to start them in the right place. In a sheltered place where the sun will keep it warm, put a tub or pail of water, throw over it some cork-chips such as grocers get as packing in kegs of grapes, and you will have a watering-place where no bees will drown, and all you will need to do will be to fill up occasionally with water. Once started there, they will be likely to continue.

One would be likely to think the bees would prefer the near-by irrigating ditch to the water-trough farther away. But bees do not object to a considerable distance, and it is possible that the trough gives better footing for the bees, and that the water in it is warmer than in the ditch.

2. I don't know. Perhaps some of your local insurance agents can tell you.

3. If I understand you correctly, you want to know how much honey you should leave above *besides* what is in the lower story. There is no need to have any above. There is room in the brood-chamber for all the stores needed for winter. There should be about 30 pounds of honey in the brood-chamber for outdoor wintering, and 20 to 25 pounds for cellaring. In a well-filled brood-comb you will have 5 or 6 pounds of honey.

## A Beginner's Questions

1. Is it necessary to examine the bees every week or oftener, taking out every frame (or just one or two), to see how they are doing?

2. If I find a great amount of drone-comb and cut some of it out, will the bees fill up the space with worker-brood?

3. Should the wax and propolis between the frames be taken off every time the hives are examined?

4. If a colony is preparing to swarm, will splitting it up, taking the queen and half the bees and brood-frames away, leaving the other half with one or two queen-cells on the old stand (filling both halves with frames with full sheets of foundation), prevent swarming, and be as successful?

5. Do bees "lay off" work a week before swarming and do nothing but eat honey? If so, would I save this by the above method?

6. What is "green" or "unripe" honey? Is not honey good to eat as soon as it is capped over?

7. Is it a good idea to arrange the hives in a row on a plank facing the south?

8. Should a colony be let alone as much as possible when it is storing honey?

IOWA.

1. No. On the contrary, disturbing them with no object in view except curiosity to see how they are getting along is at least to a slight extent objectionable, as it hinders their work. But if one has some special object in view, there may be enough gained greatly to overbalance all the harm.

2. Generally the vacant space will be filled again with drone-comb, especially if there be no other drone-comb in the hive. If, however, the drone-comb be cut out at a time when a young queen has just begun to lay, worker-comb is likely to be built. Or, if the colony be weak, worker-comb will be built. If you cut out drone-comb you can put in the hole a patch of worker-comb or of worker-foundation.

3. No, you are doing unusually well if you attend to it once a year.

4. If there is more than one queen-cell left on the old stand you will be likely to have a swarm when the first young queen emerges. Leave only one cell; or, perhaps better still, leave the

old queen on the old stand where most of the bees will be, killing all queen-cells on that stand, and put the other hive with most of the brood on a new stand.

5. They take no such vacation as you suggest. There may be a let-up for some hours, and you may see bees laden with pollen among the swarming bees.

6. Green or unripe honey is that which has not been in the hive long enough to become sufficiently evaporated. Generally it is sufficiently ripened when sealed, but there are exceptions. Fortunately the exceptions are rare.

7. Depends upon circumstances. If there is no need to economize room, it is better not to have more than 2 colonies on the same stand.

8. Yes, and at all times, unless there be some good reason for disturbing them.

## Italianizing—Swarming—Backward Season

1. About July 12th, I determined to Italianize a colony of hybrids. I purchased a valuable queen, made the hive queenless, waited two days for them to start queen-cells, then I destroyed all cells and caged the queen. (To be sure that I had destroyed all cells, I shook the bees from each frame, so I could get a better view.) In due time they liberated her, and my being "Johnny-on-the-spot" no doubt saved her, for when I looked into the hive (I did so very quietly), they were balling her. I smoked the ball after removing from the hive, and again caged the queen. The second time they took kindly to her. Now there is a dearth in the flow of honey, and on looking into the hive I find they have no honey. The new queen has started to lay a few eggs (and I have started to feed half-and-half sugar and water.) Now my main question is this: I have found two queen-cells again, one capped and two started. (I destroyed them.) Now, how did they get these cells? Do you think the bees are not satisfied that she is laying, and have a sort of supersedure fever, and have used some of her own eggs to build these cells? I know that I removed all cells before.

2. A swarm issued on July 12th. The parent colony was moved to a new stand and in time a virgin hatched. This colony is doing fine, and the virgin was purely mated, but the old queen and the swarm which I put into the new hive on the old location (I clip the queen's wings), is not doing very well. I put in 8 frames of full sheets of foundation and in a very short time they drew out 4 frames. The others haven't been drawn out yet. Well, to make a long story short, I found last week a queen-cell started, and so I waited for the outcome. A few days ago, out came a fine virgin. I looked in the hive every night for 4 nights and Miss Virgin looked fine, and the old queen was there, too. Tonight (July 27,) I looked again, and found the old queen and more eggs than I had seen before for a good while. When I picked up about 3 frames I discovered a ball of bees. I smoked them and found Miss Virgin in the center, dead as a door-nail. This hive also ran short of honey, so I started to feed. Now what was the trouble? Did the old queen stop laying because there wasn't much stores and then the bees think she was getting too old and tried to supersede her, or what was the trouble? She was bought with a 3-frame nucleus this year, and was sent to me as a last year's queen. Now did the bees ball and kill the virgin, or did the old queen meet her and kill her?

3. The season has been very backward here in New Jersey, and I want to get my colonies built up for the fall flow. We have an abundance of goldenrod, wild aster, Spanish-needle, and a little buck-



# American Bee Journal

wheat (but very little.) I ought to get something from this if my colonies are strong in bees, by that time, hadn't I?

4. I have contracted the entrances to all hives of colonies that need feeding, or that are weak in bees. The strong colonies don't need any contracting, do they?

NEW JERSEY.

ANSWERS.—1. "Johnny-on-the-spot" saved the balled queen, but are you sure that "Johnny-on-the-spot" was not also responsible for the balling? The likelihood is that the queen was not balled until you disturbed the hive, and that she would not have been balled otherwise. You did the right thing, however, to rescue her when she was balled.

The last queen-cells were from the eggs of the new queen. It is not at all uncommon to have the bees start cells after a new queen begins laying. I don't know why they do it, but it seems just a little as if they said to themselves, "Here is a chance to start queen-cells, and we have had so much trouble lately about having a queen that we better improve the present opportunity and be on the safe side." I don't know whether the bees would later destroy these cells or supersede the queen, as I have always destroyed the cells, and then the queen went on all right.

2. It is hardly likely that the bees were dissatisfied with the queen for not laying enough, as usually it is the bees that stop brood-rearing, the queen continuing to lay after the bees give up attention to the eggs. If you look in the hives in the fall, you will often find sealed brood and eggs present, but no unsealed brood, showing that the queen has continued laying at least a week after brood-rearing ceased. It is nothing unusual for the bees to supersede a queen soon after swarming, even if the queen be not very old. I don't know why they destroyed that virgin (I suppose the workers destroyed her.) They sometimes do such things with no apparent reason.

3. I dare not risk a guess as to whether your bees will find enough to fill up for winter. I would rather know first whether there is usually a good fall flow, and then guess that the usual thing would happen. Buckwheat sometimes does not yield. In some places goldenrod and aster yield nothing. They are abundant here, but a bee is seldom seen on them.

4. It is not so important to lessen the entrance, as to avoid everything that may start robbing. This year my nuclei have the same entrance as the full colonies—12 by 2 inches—and there has been only one case of robbing, and there has also been one case of robbing at a full colony with a normal laying queen. Very likely some unwise thing had been done to start the robbing.

## Getting Hives Full of Worker-Bees—Ventilating Hives, Etc.

1. What are the best ways to get hives full of workers in place of frames being almost all filled up with honey and no work being done in the supers? Do you believe that putting on supers with shallow brood-frames, early in the season, is a nearly absolute remedy for this, to be removed as soon as they are one-quarter, one-third or one-half filled with honey?

2. What is the way to contract a brood-chamber of Hoffman frame (10 to a hive)?

3. I have been deterred from ventilating colonies, by putting blocks between the hive-bottom and the body of the hive, because of pretty cool (or rather cold) nights, even when the day is quite hot. Is there any validity in such deterrence?

4. In putting frames of capped brood into inferior colonies, is it not of importance to put in first one (or scarcely) two, or may a greater number be put in?

I imagine that the surface of brood must be proportionate to the number of bees in a colony relatively weak.

PENNSYLVANIA.

ANSWERS.—1. I'm afraid in the case you first mention that you had robbing. You could hardly get bees to drown in honey by uncapping combs, but you could get a lot of bees killed by robbing.

It isn't certain just what the trouble was that made the bees fill up the brood-combs with honey without working in the super. One reason might be that the queens were not the best. Possibly it was partly because there was nothing to attract them in the super. The plan you propose will probably be satisfactory. But I have no difficulty without going to so much trouble. The drawn-out comb in the extracting-frame is so nice for the bees to deposit honey in that they are likely to begin work there just as soon as there is extra honey to store. But did it never occur to you that drawn-out comb in a section is just as attractive as in an extracting-frame? I put just one section filled, or partly filled, with drawn-out comb in the center of the super, and when the bees start in that—and they start in it as soon as they would start in an extracting-frame—they keep right on filling up the adjoining sections if there is flow enough.

2. Oh, yes, you can contract if your dummies don't come within an inch of the floor. All you need to do is to fill up the space with dummies. Nor does that take so very many dummies. Your dummies may be as thin as you like (mine are 5-16 of an inch thick), and you can space them an inch apart from center to center. Indeed, if you have as many as 3 dummies they may not want to build in the space beyond.

3. I don't think any harm will come from that greater ventilation in cool nights.

4. You must use caution or you may have a lot of dead brood. If all the brood in the comb be sealed, and if it be old enough to be hatching out, then very little care is needed, for such advanced brood will keep up its own heat nearly as well as the mature bees. But you will seldom have such combs, and if there be considerable unsealed brood, or brood that has been sealed only a short time, then there must be enough bees in the hive to cover it well. One way to avoid chilling is to take with the frame of brood the adhering bees. Only if you add too many strange bees you may jeopardize the queen. Let the strange bees never be more than half as many as the bees already in the weak colony.

Another way to do is to swap frames. Take from the weak colony a frame containing mostly young brood, and put in its place one containing brood more advanced. All the better if nearly all is sealed and just ready to hatch.

## Did the Bees Help in Perfect Fertilization?

In Connecticut there was perfect weather for the peach-bloom this year. One extensive grower said, "The lack of moisture and lively movement of the air were the agencies I attributed to the perfect pollenization this season." Don't you think the bees had something to do with that "perfect pollenization"? CONNECTICUT.

ANSWER.—It certainly looks reasonable to believe that where the air is depended on to carry pollen dry weather is favorable, for wet pollen is too heavy to be carried well. There is a possibility, however, that too dry weather would not favor the pollen adhering to the stigma. A "lively movement of the air" is also favorable, for in a dead calm the falling pollen could strike only what happens to be

directly beneath it. Even with the favor of dry weather and the air constantly on the move, the chances that a grain of pollen will alight upon a spot where it will do the most good are not very many. No matter how dry the pollen, it is still heavier than air, and is constantly falling, so that it soon gets too near the ground to do any good even to the lowest blossoms, while the blossoms at the top of the tree would stand a very slim chance. Compare that with the work of a bee that comes well dusted with pollen, which it does not scatter promiscuously, but dusts only on the blossoms. I leave you to figure out how many hundred times the amount of pollen would have to be increased to make the wind equal to the bee.

## Mating of Queens—Yellow Sweet Clover—Yellow Combs—Morning Glory as Honey-Plant

1. I see by the bee-papers that there are other bee-keepers in this State having trouble about getting queens mated. I have lost as high as 6 queens to the colony the past spring, and have had to watch every colony that swarmed and give them brood, after the queen hatched, to see if they started queen-cells. Nearly all had to rear their second queen, and some even 6. I started to rear Italian queens the past spring, and to every colony I would give 2 capped queen-cells. When they hatched I would date them and watch them. I was proud of my queens, as the past spring was my first experience in queen-rearing; but they didn't seem to mate, so I soon became discouraged. I would give eggs and brood at the proper time, after the queens hatched, and I thought it time for them to begin laying, but in every case, where I gave queen-cells, they built queen-cells, so I thought I would give up queen-rearing for the present. I am satisfied the trouble is bee-martins, as I think they pick the yellow or black queens up every time they see one. I had several nice swarms while I was in the bee-yard, and as soon as all the bees would get out, I would remove the mother colony and mark it queenless, so I could give them a queen-cell and pinch out theirs. Several times the swarm would return after flying around for a few minutes, to the old stand, where I would have a new hive with full sheets of comb foundation, and they would go right to work and build queen-cells. I have seen bee-martins flying through swarms of bees, and have seen them catch bees on the way through and twitter about it. Sometimes there would be 3 or 4 birds at a time in a swarm. Whether they caught the queen, I am unable to say, but she left the hive of the mother colony, as I looked, after the bees swarmed. Bee-martins are very thick around both my apiaries. I have 165 colonies, and queenless colonies are lots of trouble and expense. Thank goodness I have only 8 more left to mate. They are mating slowly, but I try to keep the colony strong by giving brood, but that robs the other colonies of their bees. What I want to know is this: Can I take some bees from one apiary to another (a pint) and put some yellow stuff on them that would stay on, and turn them loose a few at a time, and put some poison on them to kill the birds when they eat them? Do you know of some kind of poison to use, how to use it, and what to paint the bees yellow with, so they can fly? Is there any danger of such bees entering the hives in a strange apiary, and poisoning the honey? I have thought of this plan, but I am not acquainted with poison, so would not know what to use, nor how to use. Do you think it would work? I cannot take a shotgun and kill

# American Bee Journal

all the bee-martins, as one apiary is in a pasture where there is stock, and no shooting is allowed. Besides, I am no sportsman, and have no time to go hunting, as I believe there are more bee-martins than I could kill in a year's hunting, right in this neighborhood. Anything you suggest as to the bee-martins will be tried, as I dislike driving along the road and having them flying along, twittering at me.

2. Why is it that some sections of honey in the same super, and stored at the same time, are capped white, while others are capped yellow?

3. Will yellow sweet clover cause the bees to cap the honey yellow?

4. We have more yellow sweet clover here this year than ever before, but I seldom see a bee on it. Why is it?

5. Last year white sweet clover was everywhere; this year there is scarcely any. Why did it not grow again this year, instead of the yellow? The bees worked on the white all the time, and seemed to be crazy over it, but they paid no attention to the yellow.

6. Does morning-glory make nice honey? We have hundreds, yes, thousands, of acres here, and the bees seem to work on it some; also carpet-grass. The honey I have extracted is light amber.

7. The new brood-combs built this year look yellow, as if the bees had been on sulphur and tracked it over the uncapped combs, giving them a kind of golden color. What causes this?

CALIFORNIA.

ANSWERS.—1. I don't know whether your scheme of poisoning martins would work or not. I don't think there would be any danger of poisoning bees by it, unless you should sweeten the poison used. At a guess I would say that you might paint the back of a bee with a solution of strychnine or arsenic colored with yellow aniline dye, with possibly a little glue. Then if you could get a martin to eat enough of these bees you might accomplish your murderous design.

2. I don't know why there should be any difference in the color of two sections sealed at the same time. It is barely possible that you refer to travel-stain, which will appear on the central or older sections, while the remainder are white.

3. I think not.

4. I don't know.

5. Sweet clover is a biennial, growing the first year without blooming. Then after blooming and producing seed the second year it dies root and branch. So if you sow seed one year and leave it to itself thereafter, the tendency would be to have bloom every other year.

6. I am not acquainted with such honey, but I think I have read that it is of fair quality.

7. It is probably colored by the blossoms on which the bees are working at the time. Comb built when bees are working on dandelion is quite yellow, and it is likely that other plants affect the color of the wax.

## Taking Off Comb Honey—A Swarming Experience

1. A friend of mine, of whom I bought my bees, has a colony in a regular 10-frame dove-tailed hive. Last fall they were a little light in weight, so I advised him to put on an empty super and feed them, which he did. He left that super on all winter. When spring opened I told him to take it off and put a super on filled with sections. He left the empty super on and put the other super with the sections on top. When I saw that I told him he did wrong in not taking off the empty super. He asked me to do that. Some time after I went to do the work and saw that the bees had started

in the super and built combs below the top super to the section-holders and into the empty super, which was below the sections. I told him it was too bad now to tear off those combs, and as he wanted the honey for his own use, I would leave it just as it was, until filled, and then take them off. About two weeks passed when I took the supers off, and the bees had built the combs to the brood-frames, and filled up every little space in the supers. Now, in taking them off the combs tore, and the honey ran down and out of the entrance of the hive. About 3 hours after everything was full of bees, they flew in all directions, and it seemed as if they had a regular war. I told him I didn't know what else to do, for if the honey was left on till fall we would surely kill them, and we took the chances. If they had brood, they would have bees when the old ones were dead. After that time the bees seemed to get less, and he asked me to examine them, as he thought they were getting less. This morning I opened the hive, and by taking out the frames I saw they were all empty—no brood and no stored honey, and about one pound of bees. I didn't see any queen, either. Now, what was the right thing to do in a case like that? Is there anything to be done yet?

2. I have 11 colonies of hybrid bees, I have one that has never swarmed, and every year has stored a good amount of surplus honey; they also seemed to be much tamer than the others. They were hived 2 years ago. I am thinking of breeding queens, and to make a start with these bees, and giving queens to my other colonies that swarmed more than I wish. Would it be advisable to do that? Would it not be too late to do that this year?

3. I have one colony from which issued 3 swarms in one week—Sunday, Tuesday and Friday; and having a good honey-flow at the time, they seemed to do well. The last swarm had 4 queens. Have you ever seen anything like it?

ILLINOIS.

ANSWERS.—1. There is nothing worth while to do now, as the few bees left are probably so old they are of little value. More than one thing might have been done differently in the first place, so as to avoid such a bad case of robbing. You might have done the work just as it was beginning to get dark—too late for the robbers to get started that evening—and then by morning the bees would have cleaned up all the muss so that no robbing would be attempted. You might have done the work in a tent or in a cellar where the robbers would be kept out. When you pried up the supers and found it started the honey to running, if you had at once let them down again and closed up everything, less honey would have run, and in the course of 24 hours the bees would have cleaned it up dry, so that you could then have pried it up without starting honey to running. It is possible that you could have taken off the supers with less leakage if you had slipped a wire between the super and the hive and sawed through with the wire.

2. No, it is not too late, although if there is no honey-flow you will not succeed very well at rearing queens. If you do not succeed to your satisfaction this year, there is a plan that you might like to try next year. If your best colony is not stronger than others, give it young bees or sealed brood from other colonies, so it shall swarm first. When it swarms put the swarm on the stand of the old colony, which we will call A, and put A on the stand of another strong colony, moving this latter colony to a new place. The returning field-bees will strengthen A, and in proper time it will send out another strong swarm. This swarm you

will set in place of A, putting A on the stand of another strong colony, and moving this latter to a new place. Proceed in this way just as long as A continues to swarm, and you may have several strong swarms, all of them having queens of A stock.

3. I am not sure I ever had anything quite so bad as that, although it is nothing unusual where bees are allowed to swarm naturally and the old hive is left on the old stand, swarming continuing until 5 or more swarms have issued, all the young queens being allowed to issue at last.

## Stingless Bees

Are there any such bees as the stingless? If so, how do prices compare with golden Italians? Also, where can I buy some? Who keeps them for sale?

ILLINOIS.

ANSWER.—For some reason there seems to be an unusual inquiry for stingless bees. I don't know of any such bees in this country. In one or two cases I think they have been brought here from South America, but did not last long. Even if you could keep them, they are commercially of no value. I don't suppose you could get as much honey from a hundred colonies of them as from a single colony of the common honey-bee. Don't dream of getting stingless bees.

## Stingless, White, Cyprian, Caucasian and Carniolan Bees

Would you kindly tell me where I would be able to get the queens, or, in other words, the stingless bees, here in the United States or elsewhere? and also where I would be able to get the queens of the latest white bees which were introduced in the United States last year, and proved to be a success, and likewise the stingless race? What color are the Cyprian bees? also the Caucasian? and what is the difference as to color between the Caucasians and the Carniolans?

CALIFORNIA.

ANSWER.—See answer to "Illinois" about stingless bees, in the question above. I don't know of any bees that were introduced into the United States last year.

Cyprian bees look very much like Italians, but the yellow bands are a trifle wider and deeper in color. The difference in color between Caucasians and Carniolans is so little that they can hardly be told apart, except by other characteristics. They look much like black bees, but with an indistinct whitish stripe.

## Old Queens—Laying Workers, Etc.

1. I have one colony of bees whose cells are uneven on top—some tall and some low. What is this? Some of the brood looks pink, but does not smell. I have a virgin queen in the hive. Could she be a drone-layer only, or not purely mated?

2. How am I to get rid of a laying worker?

3. I got a queen last spring and used her as a breeder, and transferred her to several hives. Recently I took her out of a full hive and put her into a cage with plenty of candy made of honey and sugar, and let her alone, and found the bees had balled her. One wing was clipped. What was the matter? I want to remedy the trouble. I can not understand why she disappeared, and the hive was not meddled with.

4. I lose a good many virgins in August, and I don't understand what the trouble is.

5. How can I get the bees to place the honey in the super of a hive, over a caged queen one year old? I have been feeding nights.

OHIO.

ANSWERS.—1. That is not the work of a virgin, or unfertilized queen, but rather of an old queen. It is nothing very unusual when a queen becomes quite old for the store of spermatozoa to become to a certain extent exhausted, and then some of the eggs laid in worker-cells will not be fertilized and will produce drones, and the cappings of these will be raised. It is not the work of laying workers, for in that case none of the brood would be sealed later.

2. Generally the best thing to do with a colony that has laying workers is to break it up, giving the bees to other colonies. It is difficult to get the bees to accept a queen. But if the colony is strong enough, and you are anxious to have it continue, you can give it a virgin just hatched, and this will pretty



# American Bee Journal

surely be accepted. Or, you may exchange some or all of its combs with adhering bees for frames of brood and bees from another colony or colonies, and the younger bees thus introduced will accept a laying queen.

3. I don't know what the trouble was. If I knew all about just what you did, and the condition of the colony, I might tell something about it. But then, again, maybe I might not, for introducing a queen in that way is always more or less a matter of chance.

4. They are probably lost on the wedding-trip. Many virgins are lost in that way. In some places the trouble seems to be worse than in others. It is supposed that birds catch the virgins, and sometimes they are lost by returning to the wrong hive. There is more danger of their being lost in the latter way if hives are close together, all looking alike, and no landmarks, such as trees, to help mark the hive.

5. Your letter being written the middle of August, it is nothing unusual for bees to let up on brood-rearing about that time, and, of course, it is the right thing that honey should be filled in the cells left vacant by the hatching brood and not occupied by the queen. If, however, the bees have not started at all in the supers, you can do something to help that, provided enough honey is gathered. You can put in the center of the super a bait-section; that is, a section that was partly filled last year and cleaned out by the bees. If you have no such section you can

cut a small piece of comb out of a brood-comb and put that in one of the middle sections. If they are too slow about starting in an extracting-super—a thing that doesn't often happen—you can put into the super a frame of brood for a day or more, until a start is made in the adjoining frames.

## Certain Bees as Foul-Brood Fighters

1. Are the Holy-Land, Cyprian, Carniolan, and Caucasian bees as good for cleaning out foul brood as the Italians? If you do not know, have you read or heard any one speak in favor of the above bees as being good foul-brood cleansers?

2. What success have you had with your method of cleaning up foul brood—the new way tried a year or two ago? NEW YORK.

ANSWERS.—1. I don't know how the bees you mention compare with Italians in the matter of fighting foul brood, and do not remember to have seen or heard anything regarding the matter. Very likely there is not much difference. I suspect that it is not so much the particular race as it is the energy of the individual colonies. While it may be true that a certain race of bees is better than another, I suspect that the most active colony of the poorer race will do more at cleaning up foul brood than the laziest colony of the better race.

2. You will find report of my latest experience in foul brood on page 267.

derful. There was absolutely nothing until June 14th, when the flow from lucerne (alfalfa) started with a rush, and no let-up since. Bee-keepers say it continues until frost. Sweet clover is everywhere, and alfalfa close to ditches, which goes to seed. Only 4 members of the National are in this State, with room for 1000. Mr. Hutchinson's slogan for me!

B. F. SMITH, JR.

Cowley, Wyo., July 29.

[The plant in question is the Wild Liguorice, (*Glycyrrhiza lepidota*), and is considered a good honey-producer. If Mr. Smith had chewed the root he would have guessed the name.—C. L. WALTON.]

## Second Blooming of Honey-Plants

I am increasing my 300 colonies of bees to 500. There is a very fine fall flow of honey here now. At one of my yards the bees yesterday were dropping heavy on the alighting-boards, and the nectar they had in their sacks was as white and clear as water. It has a nice flavor, but I am unable at present to tell just what it is.

We have had a heavy rain-fall of late, and raspberry and milkweed and also plants blooming early in June are blooming again. It may be this second blooming is what the bees are gathering from, but the flavor is not the same.

IRA D. BARTLETT.

East Jordan, Mich., August 19.

## A Discouraging Season

Bee-keeping and honey-production have been very discouraging in this section of the country this year. We had no rains from February to August 3d. In spite of the fine prospect in early spring for white clover and linden, there was hardly a pound of honey in the hives August 1st, and brood-rearing was at a stand-still; but since the middle of this month, the bees have stored considerable honey, and we may not need to feed them for winter, besides getting some surplus.

MAX ZAHNER.

Lenexa, Kan., August 24.

## Bees Did Fairly Well

Considering the dry season we have had so far, bees have done fairly well, some of my colonies having stored about 60 pounds of extracted honey each, and others have filled 2 cases of comb honey. Sweet clover and alfalfa—our great honey-plants—had hardly ever failed to give a good supply of nectar for the bees, and more alfalfa is put out every year, so the outlook here for bee-keepers looks bright. Bees are swarming in August.

Ashton, Neb., August 16. H. HANSON.

## Honey from Alfalfa in Missouri

This is the first year I have ever noticed bees working on alfalfa in Missouri. I suppose the drouth put it in about the same condition as where they irrigate. This is the first bad drouth we have had since farmers began sowing alfalfa here, and it will be a good thing for bee-keepers, as more of it is being sown every year. Alfalfa produced seed this year, showing beyond a doubt that it produced honey.

Since May 15th we have had very little rain, but lots of wind; pastures would burn if there was anything to burn. White and red clover, I think, are all killed.

My home yard with 101 colonies in 10-frame hives was lighter July 20th than they were before fruit-bloom. I took frames of honey from the strongest and gave to the weakest, and got ready to feed.

About July 25th the bees commenced working on the heartsease in the Missouri

## REPORTS AND EXPERIENCES



### Bees Did Fairly Well

Generally bees have done fairly well around here this year, so far as I have been able to learn.

The American Bee Journal seemed like a friend to me whenever I have been permitted to read it, since 1884. I highly appreciate Dr. Miller's kindly talks, and hope some day to own a copy of his "Fifty Years Among the Bees."

Gaston, Oreg. R. L. WILDMAN.

### Results of the Season of 1911

I had 48 colonies of bees, spring count, and increased to only 63 by natural swarming. I have taken off 3,000 pounds of white honey, and buckwheat will not give me much, as there are only about 20 acres in this district.

ROBT. RUTHERFORD.

Strange, Ont., August 4.

### Not a Favorable Season for Bees

I have 45 colonies of bees. I had no swarms this year and few last year. I got about 800 pounds of basswood honey this year, but no clover honey. The clover was all killed out last fall and winter. We have had it very dry here—the driest I have ever seen, and I am in my 74th year. I lost no bees last year, as they winter well. Some of them have done very well on basswood this season. I have 2 colonies that gathered 6 pounds a day for 3 days in the best of the season. I am getting 16 cents a pound for my honey at the stores. It retails at 20 cents.

WM. CLEARY.

Algona, Iowa, August 4.

### Using Unfinished Sections

I will give my method of using unfinished sections: At the end of the honey season, I take the supers off the hives and to the honey-room, where I remove the sections. As I take the supers off, all the unfinished ones I grade into three different lots—Nos. 1, 2 and 3. Grades 1 and 2, I offer for sale—No. 1 at 8 cents

a piece, and No. 2 at 5 cents a piece. I worked up and established a trade on such honey among my neighbors and their vicinity. By doing thus, I always have orders waiting.

Grade No. 3 I do not offer for sale at all. If I have any colonies that are short of stores in the fall, I feed the No. 3 back to them, and, if not, I keep them over winter and feed them to the colony that has the least stores in order to promote brood-rearing. By thus using grade No. 3, I kill several birds with one stone—by feeding in the fall for winter stores, in the spring for brood-rearing, and also in the spring as bait-sections.

I don't see how any bee-keeper can use unfinished sections to any better advantage than the ways I have here given.

T. A. CRABILL.

St. David's Church, Va.

### Expect Good Honey-Flow—Cheap Hive-Tool

The honey-flow seems to be on now in this district, and when the flora overcomes the effects of a recent hailstorm, I think we may expect something fine in the way of a honey crop. The demand is good, and enquiries frequent.

A neat and handy little hive-tool is made from the end of a buggy-spring about 8 or 10 inches long. The round end may be used for prying off covers, supers, etc.; the other end being made square and sharpened from the concave side to a chisel edge, takes the place of the famed glazier's knife. Any machine-shop should shape and polish the tool for 10 cents.

JOHN S. SEMMENS.

Wiley, Colo., August 6.

### Wild Liguorice—Bee-Keeping in Irrigated District

I would like to know the name of the plant herewith (seed, blossom and root.) It grows quite abundantly here, and some years it is a great nectar-yielder.

This is my first year's experience in an irrigated district, and it is certainly won-

# American Bee Journal

River bottom, and alfalfa on the upland; and today they are at least 75 pounds heavier per colony than they were a month ago.

Clay County, Mo., will make a display of honey at the next meeting of the Missouri State Bee-Keeper's Association, to be held at Electric Park, in Kansas City, Mo., Sept. 26, 27, and 28, 1911.

Liberty, Mo., Aug. 20. J. F. DIEMER.

## Good Prospects for Buckwheat

Honey in this locality was only about half a crop of basswood and clover, but prospects are good for buckwheat. I never saw bees work as well, or store as much honey from buckwheat, as they are now. Some of my bees filled their extracting supers in a little over a week.

M. C. SILSBEE.

Cochocton, N. Y., August 15.

## Half Crop and No Swarms

I have averaged about 30 pounds of good clover honey per colony. The brood-chambers are well filled for winter, with good prospects for a fall flow from goldenrod and asters, which are abundant in this locality. The dry spell from June 10th to August 10th cut off one-half of the honey crop in this section. Abundant rain, which has just fallen, should give us some fall surplus honey. No swarms this season.

## Honey Short, but Other Crops Good

Bees in New Hampshire were doing fine until July 1st when the hot wave struck us. It dried up the clover, but I am hoping the bees will finish up what they have started on goldenrod; some swarms had 84 one-pound sections nearly finished at that time. One week more would have finished them. Our crops are good. Potatoes sell here for \$2.00 a bushel now.

EDGAR RICARD.

Canaan, N. H., August 7.

## May Not Need to Feed Much

Since I wrote you, July 15th, we have had some showers. We had a very heavy one the evening of the day I wrote. There will be something of a corn crop, but not such a one as we have in seasons of greater moisture. Notwithstanding the heat and dryness, I am surprised at the weight of my brood-chambers. I expected to have to feed much, but it looks now as if I shall have to feed but little. The colonies I am feeding are those that got queenless early, and did not have field-bees in sufficient numbers early enough to get anything from the early flow.

I have faith in bees, but know that I must soon go the way that Hutchinson and Hilton have gone. They rest in peace and their works do follow them. May it be so with me.

EDWIN BEVINS.

Leon, Iowa, August 14.

## Sweet Clover for Milk Cows and as a Fertilizer

I enclose a clipping from one of our local papers. This is the first time that I noticed an article of this kind in a local paper, and I believe that the story is worth repeating. It took a long time to educate the farmers to the value of sweet clover, but I hope that we are "getting there," slow but sure.

I know by experience that sweet clover is very good feed, especially for milk cows, for when we were on the farm, some years ago, we had a piece of hay, half of which was sweet clover. We cut everything, thinking that the stock would pick the hay and discard the "stuff." Well, to our surprise, they did, but they

ate it first in preference to the timothy. If any reader does not believe this, try it and be convinced, and you'll be surprised how greedily the cattle will eat it in preference to the best hay.

St. Anne, Ill., July 29. H. S. DUBY.

The following is the clipping about sweet clover, referred to by Mr. Duby, which shows that this great clover is finally "having its day."

## SWEET CLOVER NOW RECOGNIZED AS ONE OF THE MOST VALUABLE FERTILIZERS.

On the McDougall farm in Danforth township, Iroquois county, Illinois, there was sown 60 acres of the common sweet clover, of the kind that usually grows at the side of the road and is considered somewhat of a nuisance except for pasturage for bees. However, according to "Bob" McDougall, who told the writer about the story, sweet clover is coming to be considered a valuable food-plant, and is also much superior to red clover in improving the soil, as the roots spread out more and go down further, and have more of the microbes that assimilate nitrogen.

The sweet clover has grown up about as high as a man's head, and is a veritable jungle of vegetation on the ground. Some of it has been pastured, the cattle eating the tops greedily when in blossom. The most of the 60 acres will be cut for hay and the seed threshed out.

Supervisor Gilfillan, of Belmont, has tried some experiments in the sweet clover line, and thinks it might be made quite a success.—*Watseka (Illinois) Republican*.

## Report for 1911—Swarming and Clipping Queens

I had 42 colonies of bees, spring count, in 10-frame double-wall hives, on Hoffman frames, and have increased to 74, the increase being from about one-third of the whole number, 2 of them having swarmed 4 times, which was very unusual, and entirely too much. However, the parent colony built up, and is now doing super-work. The swarming commenced the first part of June, nearly all filling a super before swarming. The prime swarms have filled 2, and some 3 supers, and most of the second swarms have filled one super. They have sufficient stores for the winter. I don't generally have more than one swarm to every 4, and very seldom a second swarm. This has been an exceptional season in the way of swarming. I am certainly in a good location as to bee-pasture. I produce comb honey entirely, and have the bees starting super-work in the after part of fruit-bloom, which is helped very much by the dandelion bloom, followed by white clover and alsike. Then we have quite a locust bloom, followed by a large crop of sumac and basswood, catnip, and raspberry. We have had about 10 days in the buckwheat bloom, which is unusually good on account of the late rains which have pushed forward the late blossoms that promise a good yield, such as heartsease, blue and white asters. We also have quite an abundance of goldenrod, but the bees seldom work on it here.

We had quite a drouth through July, but the late rains have pushed everything forward till there is prospect of a fair honey crop. My colonies, from present indications, will average 40 sections apiece, leaving off the afterswarms, and will be all ready for wintering, excepting 2 late swarms that will likely need some additional combs of honey.

I feel like expressing myself as to the war against natural swarming and the clipping of queens. My experience is that a swarm coming off when the queen is disabled, and can't be with them when

they alight, is a regular nuisance and bother, while if she is with them it is no trouble to take them to their intended hive, and they go right in, and all is well without having to hunt her up, and then get her and the swarm together.

The clipping of queens is entirely contrary to Nature, and I believe the time is coming when it will be a thing of the past. My bees are of the Golden Italian strain, and are very gentle, and are hustlers.

I would be glad for some information on how to get the much-advertised sweet clover to grow. I have bought seed and sown it three different seasons, and on different kinds of soil, but have failed to get it to grow. Must it have lime, or must the ground be inoculated with soil from the ground from which it grew?

W. S. WILLIAMS.

Julian, Pa., August 15.

[We expect to publish quite a little on the growing of sweet clover, during the next few months, and would invite any who have had experience with it, to write us about it for publication.—EDITOR.]

"Southern Bee-Culture" is the name of a booklet written by J. J. Wilder, perhaps the most extensive bee-keeper and honey-producer in the whole State of Georgia. It is a real hand-book of Southern bee-keeping, with methods so simply described that they are easy to carry out. Every bee-keeper, especially in the South, should have a copy of Mr. Wilder's booklet. He conducts apiaries by the dozen, and produces many tons of honey every season. He tells in careful detail just how he does it. The price of this booklet is 50 cents, or we now club it with the *American Bee Journal* for a year—both for \$1.30. Send all orders to the *American Bee Journal*, 117 North Jefferson St., Chicago, Ill.

"A Year's Work in an Out-Apiary" is the name of a booklet by G. M. Doolittle, the well-known honey-producer of New York State. He tells how he secured an average of 114½ pounds of honey per colony in a poor season. It is fully illustrated, and tells in detail just how Mr. Doolittle has won his great success as a honey-producer. The price of the booklet is 50 cents, postpaid, but we club it with the *American Bee Journal* for a year—both for \$1.30. Every bee-keeper should have a copy of this booklet, and study it thoroughly. Address all orders to the *American Bee Journal*, 117 North Jefferson St., Chicago, Ill.

## "Bee-Keepers' Guide"

This book on bees is also known as the "Manual of the Apiary." It is instructive, interesting, and both practical and scientific. On the anatomy and physiology of the bee it is more complete than any other standard American bee-book. Also the part on honey-producing plants is exceptionally fine. Every bee-keeper should have it in his library. It has 544 pages, and 295 illustrations. Bound in cloth. Price, postpaid, \$1.20; or with a year's subscription to the *American Bee Journal*—both for \$1.90. Send all orders to the office of the *American Bee Journal*.



# American Bee Journal

## BEES AND HONEY

# FIRST LESSONS IN BEE-KEEPING

NEWMAN

DADANT

The above is the title of a new and revised edition of what for many years was the book called "Bees and Honey," written by the late Thomas G. Newman, editor of the American Bee Journal. Mr. C. P. Dadant, whose reputation as a honey-producer and expert bee-keeper is unquestioned, revised the book recently. The last edition consisted of 160 pages, but the revised edition, hereafter to be known as "First Lessons in Bee-Keeping," contains nearly 200 pages, and is perhaps the most generously illustrated bee-book of its size now published, as it has over 150 pictures.

"First Lessons in Bee-Keeping" is principally for beginners in the bee-business, as its name indicates. It contains the foundation principles of bee-keeping—just what every beginner ought to know in order to start right with bees. It does not pretend to cover the subject in so thorough manner as do the higher-priced and larger bee-books, such as "Langstroth on the Honey-Bee," Prof. Cook's "Bee-Keepers' Guide," etc., but there are a large number of very important preliminary principles that should be well understood by every one who intends to take up bee-keeping, and this book is just the thing for that purpose.

It is printed on excellent paper, and well bound in pamphlet style, and also in cloth. The outside appearance of the cover of the pamphlet edition is different from anything yet seen on a bee-book. One can know without reading a word that it is something about bees, by simply looking at the cover, either front or back.

We intend to present a copy of the pamphlet edition to any person who sends us \$1.00 for a year's subscription in advance to the American Bee Journal, whether a new or renewal subscriber; but, of course, the booklet must be asked for when subscribing and sending the dollar.

The price of "First Lessons in Bee-Keeping," bound in strong paper, is 50 cents, postpaid; in cloth it is 75 cents, or with a year's subscription to the American Bee Journal—both for \$1.25. We would suggest that you secure a copy of the book in connection with your own advance renewal subscription, and then show it to your neighbor bee-keepers, and get them to send in their subscription; or, if you wish to sell the book to your neighbors, we will make you a liberal discount for such purpose. But be sure to get a copy of the book yourself, so as to see what a beauty it is. Address,

**George W. York & Co., 117 N. Jeff. St., Chicago, Ill.**

## Wants, Exchanges, Etc.

[Advertisements in this department will be inserted at 15 cents per line, with no discounts of any kind. Notices here cannot be less than two lines. If wanted in this department, you must say so when ordering.]

ITALIAN QUEENS, 75c; tested, \$1.00; breeders, \$5.00. W. T. Hellyer, St. Louis, Mo.

QUEENS from New Hampshire, 50 cents. 8Atf W. B. Burlingame, Exeter, N. H.

FOR SALE.—Bees, honey, and bee-supplies. We are in the market for beeswax and honey. 5Atf Ogden Bee & Honey Co., Ogden Utah.

WANTED—Early orders for the Old Reliable Bingham Bee-Smokers. Address, 12Atf T. F. Bingham, Alma, Mich.

FOR SALE—40 colonies of bees in Root 8-frame hives; tools and fixtures. E. C. Richardson, Rt. 3, Adrian, Mich.

FOR SALE—50 colonies bees in 10-fr. hives in good condition. Price on application. 9Atf E. H. Canfield, Carson City, Mich.

INDIAN RUNNER Duck Culture Book. Information that beginners are looking for. (Special price, 50 cents.) Catalog for two stamps. 8Atf Levi D. Yoder, Box 44, Dublin, Pa.

FOR SALE—Fine Italian Queens, hustlers; untested, one, 75 cts.; 6 for \$4.00; tested, \$1.25 each. Edw. A. Reddert, Baldwinville, N. Y.

FOR SALE—Empty second-hand 60-lb. cans, as good as new; two cans to a case, at 25c per case. C. H. W. Weber & Co., 2146 Central Ave., Cincinnati, Ohio.

200 TESTED RED CLOVER and GOLDEN young Queens, after 20th of September—50 cents each. Evansville Bee & Honey Co., Evansville, Ind.

WANTED—To buy a two-Hoffman-frame honey-extractor, automatic reversing. Must be in working order. State price. J. C. Gakler, Rt. 1, Box 146, Memphis, Tenn.

FOR SALE—On account of old age and poor health, I wish to dispose of my bees—about 40 colonies, all in excellent condition. Inquire of American Bee Journal.

MUSIC—Beautiful variations of "Where is My Wandering Boy Tonight," sent on receipt of 25c in stamps. Mrs. F. W. Ericson, Box 38, Rockton, Wis.

SECOND-HAND CANS—Good ones, two 5-gal. in a box—5 boxes at 45 cts. a box; 10 boxes at 40 cts. a box; or 20 boxes at 35 cts. a box. Address, George W. York & Co., 117 N. Jefferson St., Chicago, Ill.

Colonies of Italian bees in L. hives, 10-fr., built on full brood-fdn., wired, body and sh. super, redw., dov., 3 coats white, sheeted lids, each neat, modern and full-stored—any time. Jos. Wallrath, Antioch, Cal. 2Atf

FOR SALE—5000 lbs. Yellow Sweet Clover Seed, new crop (biennial); 4 lbs. hulled, by mail, prepaid, \$1.10; 50 to 100 lbs., 15 cts. per lb.; unhulled, 3 cts. per pound less. Alfalfa Seed, \$16.00 per 100 pounds. 7Atf R. L. Snodgrass, Rt. 4, Augusta, Kan.

ITALIAN QUEENS—Having purchased the bees and queen-rearing business of J. L. Fajen, Alma, Mo., we are prepared to furnish Golden and Leather-Colored Italian Queens of superior quality in quantities. Write for prices. C. E. Walker Merc. Co., Kansas City, Mo.

SUPERIOR ITALIAN QUEENS—\$1.00 each; Queens that are well worth the money. If you don't think so after trial, I will replace free next season. Tested Breeding Queen, \$2.00. Directions for introducing furnished to those who want them. E. W. Brown, Queen-Breeder, Willow Springs, Ill.

THE MICHIGAN BEE-KEEPERS' ASSOCIATION BOOKLET—The booklet is now ready for distribution. Send in your request on a postal card and a copy will be sent you free. The members have much less honey to sell this year than last, so you should write quick. E. B. Tyrrell, Sec., 230 Woodland Ave., Detroit, Mich.

FOR SALE.—500 3 and 5 Band Queens. Not Cheap Queens, but Queens Cheap. 3-Band Queens as follows: Untested Queens—1 for 75 cts.; 6 for \$4.20. Tested Queens—1 for \$1; 6 for \$5.70. 5-Band Queens as follows: Untested Queens—1 for \$1.00; 6 for \$5.70. Tested Queens—1 for \$1.50; 6 for \$8.70. Directions for Building Up Weak Colonies, 10 cts. 2Atf W. J. Littlefield, Little Rock, Ark

FOR SALE—A bee-hive factory with one acre of ground. The factory has 2500 square feet of floor space, and machinery sufficient for making hives and portable poultry houses; two small groves on the place; 35 fruit-trees, and abundant small fruits; a 4-room house; business growing; electric power; all modern conveniences; close to the cars and school, and 40 minutes to the city of Portland, Oregon. Write for full description. The Bee-Hive, Box 167, Lents, Oregon.

## Honey to Sell or Wanted

FOR SALE—Nice, thick, well-ripened extracted honey in 60-lb. cans, two to the case, at 7½ cents per pound. Sample free. M. C. Silsbee, Rt. 3, Cohocton, N. Y.

FOR SALE—6000 lbs. well-ripened basswood honey in 60-lb. cans at 9c per lb.; in barrels, 8c. Sample free. 8Atf Jos. B. Hesseling, Rt. 3, Potosi, Wis.

WANTED—Choice extracted white and amber honey in barrels or cans. Send sample, and price delivered f. o. b. Preston. 11Atf M. V. Facey, Preston, Minn.

WILL PAY for early shipments of good flavored clean honey. Extracted, 60-lb. cans, 8c. Comb in sections, frames or boxes, 15c net weight. F. O. B. Baxter Springs, Kan. 3Atf O. N. Baldwin.

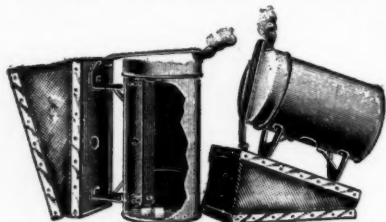
FOR SALE—Raspberry Honey, small admixture of clover, basswood and willow-herb, 60-lb. cans (net), 2 in box, 10½ cts., f. o. b. Goodman, Wis. Sample 10 cents; may be deducted from an order. 6Atf E. Woodall, Goodman, Wis.

FOR SALE.—Absolutely pure California sage extracted honey; several cars white and light amber, in 60-lb. tins, two tins to a case. Write us for samples and prices. Rather Bros., Managers, Hemet Valley Bee-Keepers' Association, Hemet, Cal. 7Atf

WANTED—We wish to buy white extracted and fancy comb honey in small or car lots. We pay cash on arrival. Send a small sample of extracted, state price, and we will advise by return mail. E. R. Pahl & Company, Milwaukee, Wis. 8Atf

Established in 1894.

**Gold Medals** St. Louis Exposition, 1904.  
Jamestown Centennial, 1907.



### Danzenbaker x Smoker

Shown above in a standing and reclining position. In the latter the grate is under, that it may have a full head of smoke ready on the job at a touch of bellows.

The perpendicular **Fire-Draft Grate**, forcing air **both ways**, makes and cools the smoke, forming a **Double Fire-Wall** for **securely** riveting the **double-braced** brackets to the cup, that is **firmly bolted** to the valveless bellows by **Locked Nuts**.

The **One-Piece** cap **can not clog**. It is the **coolest, cleanest, strongest, best, and largest** not capacity of all smokers, selling at one dollar (\$1.00). We **guarantee satisfaction** or **return** the price; only three complaints in **six years**.

Dan-z. 3 1/2 x 7 1/2-inch Prize Smoker, \$1.00;  
by mail.....\$1.25  
With American Bee Journal \$1.00 per  
year, and Prize Smoker, by mail.... 1.75  
Dan-z. 3 1/2 x 6-inch Victor Smoker, 80c;  
by mail..... 1.00  
With American Bee Journal one year,  
about 400 pages, by mail..... 1.65

We send **Propolis Shields** with Danzenbaker Hives and Supers, and sell anything in the Bee-line at factory prices, also select three-banded Italian queens and bees.

Please send address of yourself and B-friends for **FREE** catalogs and prices on Bee-supplies, Bees, Queens, Hives, Sections and Smokers. Address, 4Atf

**F. DANZENBAKER,**

68-70 Woodside Lane, NORFOLK, VA.

## Queens Ready Now!

**Not Cheap Queens,  
But Queens Cheap.**

### Prices of 3 and 5-Band Queens.

3 Band Untested Queens, 1.	\$ 0.75; 6.	\$ 4.20	
3 " Tested	1.	1.00; 6.	5.70
3 " Breeder	1.	5.00; 6.	25.00
5 " Untested	1.	1.00; 6.	5.70
5 " Tested	1.	1.50; 6.	8.70
5 " Breeder	1	10.00; 6.	50.00

Directions for building up weak colonies, 10 cents.

The above Queens are reared from selected Red Clover Mothers. For Gentleness, Beauty, and Good Working Qualities no better BEES can be found. Our Queens are all large, well-developed Queens, reared entirely by the BEES. We use no artificial plans to rear Queens—the BEES far better understand the job than MAN.

**Dealer in Bee-Keepers' Supplies.**

**W. J. LITTLEFIELD,**

R. F. D. 3 LITTLE ROCK, ARK.

## Famous ITALIAN Queens From the Sunny South

Three-Bands and Goldenes bred in their purity.

Hundreds of fine Queens ready March the First. Untested, 75 cts. each; six, \$4.20; one dozen, \$7.20. Tested Queens, \$1.25 each; six, \$7.00; one dozen, \$12.00.

All orders filled promptly. Address all orders to—

**D. E. BROTHERS,**

2A9t JACKSONVILLE, ARK.

Please mention Am. Bee Journal when writing.

# Tennessee-Bred Queens

**All from Extra-Select Mothers,  
Davis' Best, and the  
Best Queens Money Can Buy**

**39 Years' Experience in Queen-Rearing.**

**Breed Three-Band Italian Queens Only.**

July 1 to Nov. 1			Nov. 1 to July 1				
	1	6	12	1	6	12	
Untested.....	\$ .75	\$4.00	\$7.50	\$1.00	\$5.00	\$9.00	The Very Best Breeder \$10.00
Select Untested...	1.00	5.00	9.00	1.25	6.50	12.00	Select Breeder " 5.00
Tested .....	1.50	8.00	15.00	1.75	9.00	17.00	Nuclei—no queen—1-fr. 2.00
Select Tested.....	2.00	10.00	18.00	2.50	13.50	25.00	" " " 2-fr. 3.00
							" " " 3-fr. 4.00
							Colony " " 8-fr. 8.00

Select the Queen wanted and add her price to the price of the Nucleus or Full Colony.

For Queens to be exported, add 20 percent to above prices, except to Canada, Cuba or Mexico.

All Contracts have now been filled, and I am at last ready to serve you promptly.

**JOHN M. DAVIS,**

Dealer in, Importer and Breeder of

**Italian Queen-Bees**

**SPRING HILL, TENN.**

Depot, Telegraph & Express  
Offices—Ewell Sta. on L. & N. Ry.

## QUEENS

**From the Old Reliable  
Queen-Breeder**



Every Queen represents the highest Breed of Italian Bees. Golden, 5-Banded, and 3-Banded Queens from my Superior Strains, which are prolific, and hustlers for honey. No disease. Untested, \$1.00 each; \$5.50 for 6.

After July 1st, 75c each; \$4.00 for 6.

Tested, \$1.50; after June 1st, \$1.25 each; \$1.00 each after July 1st, or \$10 a dozen.

Select Queens of either grade, 25c extra. Breeders, \$5.00 each.

**Daniel Wurth, Rt. 1, Wapato, Wash.**

## Marshfield Sections

**Best Dovetail Hives**

with Colorado Covers

Hoffman Frames, and everything pertaining to Bee-Keepers' Supplies sold at **Let-live Prices**.

**Berry Boxes, Baskets, Crates, etc.**

kept in stock. **Wholesale and Retail.**

Prices sent for asking.

**W. D. Soper, 323 and 325 Jackson, Mich.**

Please mention Am. Bee Journal when writing.



## QUEENS!

248 pounds of comb honey was taken off my breeding queens. Prices: Untested selected, 75c; average queen, 65c; tested, \$1.00 each; limited number at \$7.00 per dozen. oArt

Try these queens.

**Chestnut Hill Apiary  
Biglerville, Pa.**

Please mention Am. Bee Journal when writing.

## I Love My Clover Honey, but Oh You Sweet Spanish-Needle!

Our Spanish-Needle is a hive-ripened article of clear golden color and rich, genuine honey-flavor. Send for sample, or better, order a sample case and give yourself and your customers a treat with this delicious honey. Single 120-pound case, 9/16c per lb.; 5 cases at 9c.

**F. B. Cavanagh, Hebron, Indiana**

Please mention Am. Bee Journal when writing.

## MAKE HENS LAY

By feeding raw bone. Its egg-producing value is four times that of grain. Eggs more fertile, chicks more vigorous, broilers earlier, fowls heavier, profits larger.

**MANN'S LATEST MODEL Bone Cutter**

Cuts all bone with adhering meat and gristle. Never clogs. **10 Days' Free Trial.** No money in advance.

Send Today for Free Book.  
F. W. Mann Co., Box 340, Milford, Mass.

Please mention Am. Bee Journal when writing.



# MARSHFIELD GOODS

## BEE-KEEPERS:—

We manufacture Millions of **Sections** every year that are as good as the best. The **CHEAPEST** for the Quality; **BEST** for the Price. If you buy them once, you will buy again.

We also manufacture **Hives, Brood-Frames, Section-Holders and Shipping-Cases.**

Our Catalog is free for the asking.

**Marshfield Mfg. Co.,**

**Marshfield, Wis.**

## Sweet Clover Seed!

Sweet Clover is rapidly becoming one of the most useful things that can be grown on the farm. Its value as a honey-plant is well known to bee-keepers, but its worth as a forage-plant and also as an enricher of the soil are not so widely known. However, Sweet Clover is coming to the front very fast these days. Some years ago it was considered as a weed by those who knew no better. The former attitude of the enlightened farmer today is changing to a great respect for and appreciation of Sweet Clover, both as a food for stock and as a valuable fertilizer for poor and worn out soils.

The seed can be sown any time. From 18 to 20 pounds per acre of the unhulled seed is about the right quantity to sow.

We can ship promptly at the following prices for the white variety:

Postpaid, 1 pound for 30 cents, or 2 pounds for 50 cents. By express f. o. b. Chicago—5 pounds for 80c; 10 pounds for \$1.50; 25 pounds for \$3.50; 50 pounds for \$6.50; or 100 pounds for \$12.00.

If wanted by freight, it will be necessary to add 25 cents more for cartage to the above prices on each order.

**George W. York & Company,**

117 N. Jefferson St., CHICAGO, ILL.

## Italian Queens by Return Mail.

Cyprians, Carniolans, Caucasians and Bannats. Italians—Untested, 75c; Tested, \$1.25; Breeders, \$3.00. Others, 25c extra. Two 5-gallon cans, 50c; 1 gallon, \$8.25 per 100; 1 lb. panel and No. 25 bottles, \$3.75 a gross in crates; in boxes, 75c extra. Complete Alexander Hive, 9-F., 2-story, double cover, \$2.00; Alex. Veil, by mail, 45c. Gleanings or Bee-keepers' Review, to new subscribers, 75c a year. Langstroth by mail \$1.00. Italian Bees, \$10.00 a colony, 8-F. with super. Supplies and Honey. Send for Catalog. Free School—Saturday afternoon classes.

**Walter C. Morris, 74 Cortlandt St., NEW YORK, N. Y.**  
Apiary—Yonkers, N. Y.

"**Bees and Honey**"—the book by Thos. G. Newman—is almost out of print, but we have a few copies left (cloth bound) at 30 cents each. Do you want one? Address the office of the American Bee Journal.

## QUEENS

AND BEES—an improved superior strain of Italians is what QUIRIN REARS. All yards winter on summer stands with practically no loss. Our stock is hardy, and will ward off brood diseases.

In the spring of 1900, we sent fifty nuclei to J. D. Dixon, Lafarge, Wis., and on July 20th (same year) he wrote us, saying they did just splendid, as that writing they had already filled their supers, and that he would have to extract them. We have files of testimonials similar to the above.

Prices after July 1

	1	6	12
Select queens.....	\$ 75	\$ 4 00	\$ 7 00
Tested queens.....	1 00	5 00	9 00
Select tested queens.....	1 50	8 00	15 00
Breeders.....	3 00	15 00	....
Golden five-band breeders..	5 00	....	....

Hurry in your order as it soon will be time to unite nuclei for winter. This is the last time this ad will appear for this season, so save it for future reference. No order too large, none too small. Will keep 500 to 1000 queens on hand ready to mail. Safe delivery and pure mating guaranteed. Over 20 years a breeder. Testimonials and circular free. 5A5t

**QUIRIN - THE-QUEEN-BREEDER,**  
**BELLEVUE, OHIO**

## "Scientific Queen-Rearing"

No other book compares with this one written by Mr. G. M. Doolittle. He is an expert in the business. It tells just how the very best queens can be reared. Bound in cloth. By mail, \$1.00; or with the American Bee Journal, one year—both for \$1.60. In leatherette binding, 75 cents, postpaid; or with the American Bee Journal one year—both for \$1.25. Send to the American Bee Journal,

## QUEENS of MOORE'S STRAIN of ITALIANS

Produce workers that fill the supers, and are not inclined to swarm. They have won a world-wide reputation for honey-gathering, hardiness, gentleness, etc.

My Queens are all bred from my best long-tongued three-banded red-clover stock (no other race bred in my apiaries), and the cells are built in strong colonies well supplied with young bees.

## I am Now Filling Orders By Return Mail

and shall probably be able to do so until the close of the season.

### PRICES

Select Tested..... \$2.00  
Extra Select Tested. 3.00

Untested Queens, \$1.00 each; six Queens, \$5.00; doz., \$6.00. Select Untested, \$1.25 each; six, \$6.00; doz., \$11.00. Safe arrival and satisfaction guaranteed. Descriptive Circular Free. Address, 6Atf

**J. P. Moore, Queen-Breeder,**  
**Rt. 1., Morgan, Ky.**

Please mention Am. Bee Journal when writing.

## TEXAS HEADQUARTERS

Root's Supplies for Bee-keepers.

Makers of Weed New Process Comb Foundation.

Buy Honey and Beeswax.

Catalogs Free.

**Toepperwein & Mayfield Co.**

Cor. Nolan & Cherry Sts.,

4Atf San Antonio, Texas.

Please mention Am. Bee Journal when writing.

## MILLER'S STRAIN Red Clover Italian Queens

Bred from my superior breeder for business; gentle; no better hustlers; bees just roll honey in; three-banded; northern bred; hardy and vigorous; winter well; not inclined to swarm; bred from best leather-colored, long-tongued, red-clover strains. Untested, \$1.00; six, \$5.00; dozen, \$9.00. Select untested, \$1.25; six, \$6.00; dozen, \$11.00. Circular free. Satisfaction guaranteed. Isaac F. Miller, of Reynoldsville, Pa., a queen-specialist, is my apiarist and manager, who has been before you quite a number of years.

**J. S. Miller, Rt. 2, Brookville, Pa.**

Please mention Am. Bee Journal when writing.

## MOTT'S Strain of R. C. Italians

My 10-page Descriptive Price-List free. Untested, \$1.00 each; \$6.00 per doz. Natural Golden, from Imported Italian Stock, \$1.10 each; \$10 per doz. Reduced rates July 1st.

Nuclei and Bees by Pound.  
List to select from: Clubbing "The Pearce Method of Bee-Keeping" (price 50c) with a Guaranteed Queen, for \$1.10. Books by return; Queens after June 10th. Leaflets, "How to Introduce Queens," 15c each; also, "Increase," 15c each—or both for 25c. 3A7t

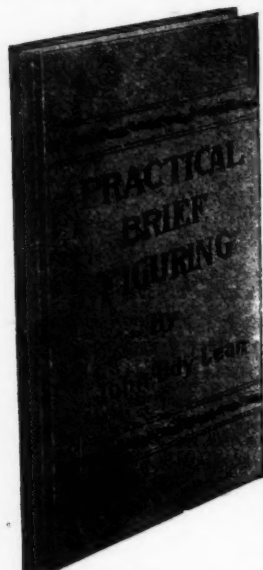
**E. E. Mott, Glenwood, Mich.**

3A7t Please mention Am. Bee Journal when writing.

# American Bee Journal

## Are You Good at Figures?

These Books would help you much



### Practical Brief Figuring

Makes figuring easy and attractive. It contains "short cuts" for the merchant, manufacturer, mechanic and farmer, besides a treatise on the Civil Service Examination in arithmetic.

### Freaks of Figures

Is a collection of interesting and very amusing mental diversions for parlor entertainments and social gatherings for old and young. Both of these books are printed on an excellent quality of paper, and neatly bound.

We have completed arrangements with the author by which these books may be secured by all subscribers of the American Bee Journal at a nominal figure as follows:

We will send you the American Bee Journal for one year and a copy of either "Practical Brief Figuring" or "Freaks of Figures," prepaid, for \$1.30.

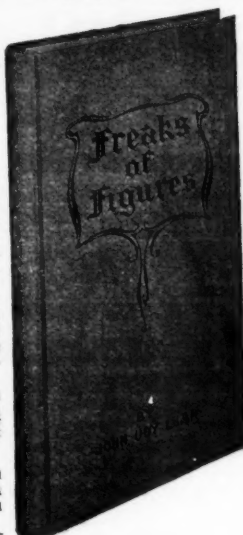
We will send you the American Bee Journal for one year and a copy of both books, prepaid, on receipt of \$1.70.

These offers are good for new

subscriptions and renewals.

The postpaid price of "Practical Brief Figuring" is 60c; of "Freaks of Figures," 50c.

George W. York & Co., 117 N. Jefferson St., Chicago, Ill.



**Poultry Profits Doubled**

**CAPONIZING** brings the largest profits—100% more than other poultry. Caponizing is easy and soon learned. Capons sell for 30c. a pound, while ordinary poultry brings only 15c. a pound. Progressive poultrymen know these things and use

**PILLING CAPONIZING SETS**

Sent postpaid, \$2.50 per set with "Easy-to-use" instructions. We also make **Poultry Marker**, 25c. **Gape Worm Extractor**, 25c. **French Killing Knife**, 50c. Booklet, "Guide for Caponizing," FREE.

G. F. PILLING & SON CO., 23d & Arch Sts., Philadelphia, Pa.

### NEW ENGLAND BEE-KEEPERS

Everything in Supplies.  
New Goods. Factory Prices.  
Save Freight & Express Charges.

Cull & Williams Co.

4Atf PROVIDENCE, R. I.

## The Swarthmore Apiaries

are now shipping their well-known

### PEDIGREED GOLDEN QUEENS

The Swarthmore Apiaries,

6A4 Swarthmore, Pennsylvania.

## "First Lessons in Bee-Keeping" SEE PAGE 281

## 20th Century Shipping-Cases

"For several years back, both producers and buyers of comb honey have been gradually coming to the conviction that stronger and better shipping-cases are demanded by the trade; and that the policy of buying the cheapest shipping-cases that can be obtained, or, worse still, having them made at some local planing-mill, would, if continued, ultimately kill the comb-honey business, leaving the field exclusively to extracted honey or bulk or chunk honey. The very fact that comb-honey producers have been changing over to the production of extracted honey, that ex-

tracted honey is constantly coming nearer and nearer to the price of comb honey, and that some comb-honey buyers are refusing to take comb honey any more, shows only too plainly that the comb-honey business is doomed unless saner and safer methods are used for shipping the product: and, furthermore, there are not a few evidences to show that transportation companies are liable to advance the rates on comb honey. Taking all these things into consideration, the movement toward saner methods of shipping so fragile a commodity has begun none too soon."

The above is a reprint from **Gleanings in Bee Culture** and a part of a circular we have prepared on

### Modern Methods of Shipping, by Which a Large Part of the Leakage and Breakage of Combs will be Eliminated

Every comb-honey producer or shipper ought to read this circular and become familiar with the **20th Century Shipping-Cases** therein described. These cases—single and double tier—will be furnished at the following prices:

	I NAILED.	PRICE IN FLAT		
		I	IO	100
12-lb. safety case for 4¼x1½ sections.....	25	20	\$1 80	\$17 00
24-lb. safety case for four rows, 4¼x1½ sections.....	40	35	2 80	26 00
24-lb. safety case, double tier, for 4¼x1½ sections.....	40	35	2 80	26 00
12-lb. safety case for 4¼x1½ sections.....	25	20	1 70	16 00
24-lb. safety case for four rows of 4¼x4¼x1½ sections.....	40	35	2 60	24 00
24-lb. safety case, double tier, for 4¼x1½ sections.....	40	35	2 60	24 00
12-lb. safety case for 4x5x1½ sections.....	25	20	1 70	16 00
24-lb. safety case for four rows of 4x5x1½ sections.....	40	35	2 60	24 00

These cases will be furnished with two-inch glass, and not with three-inch. If preferred, a wooden slide can be used in place of the glass. For the present we will furnish these cases for only three sizes of sections—the 4¼x4¼x1½ beeway, 4¼x4¼x1½ plain, and 4x5x1½ plain. A special carton must be made for each size of section used; and as these are the sections in common use we will not, for the present, supply other sizes. The price of each style of case will be the same for each size of plain section, and a little more for the beeway, as it is larger.

Cases include nails, glass, carton for each section, corrugated paper for top, bottom, and both ends, and in the double-tier case a sheet between the top and bottom tiers, also paper for tray in bottom.

**The A. I. ROOT COMPANY, MEDINA, OHIO.**



# CARNIOLAN QUEENS

Bred from Best Imported Strains.

These bees are large and very gentle. Some of the colonies can be manipulated without smoke or veil.

## PRICES

One, 75 cts.	UNTESTED Six, \$4.25	Twelve, \$8.00
One, \$1.00	TESTED Six, \$5.50	Twelve, \$10.00

**WM. KERNAN,**  
Rt. 2, DUSHORE, PA.

## Bee-Supplies

We are Western Agents for— 1Atf

### "FALCONER"

Write for Fall Discounts—we can save you money.

**C. C. Clemons Bee-Supply Co.**  
128 Grand Ave., Kansas City, Mo.  
Please mention Am. Bee Journal when writing.

## Mexico as a Bee-Country

B. A. Hadsell, of Buckeye, Arizona—one of the largest bee-keepers in the world—has made six trips to Mexico, investigating that country as a bee-country, and is so infatuated with it that he is closing out his bees in Arizona. He has been to great expense in getting up a finely illustrated 32-page booklet, describing the tropics of Mexico as a Bee-Man's Paradise, which is also superior as a farming, stock-raising and fruit country. Where mercury ranges between 55 and 98. Frost and sun-stroke is unknown. Also a great health resort. He will mail this book by addressing.

**B. A. Hadsell, Lititz, Pa.**  
Please mention Am. Bee Journal when writing.

## Missouri-Bred Queens!

My strain of bees is the result of many years' breeding and selection. I believe they are equal to any, and surpassed by none. They are long-lived, winter well, breed early, and are unexcelled honey-getters. The workers are long-bodied, good-sized bees, uniformly marked with bands of orange yellow. They are good comb-builders, gentle and easy to handle, and yet protect their homes from robbers. You will make no mistake in introducing these queens into your apiary. I guarantee safe delivery at your post-office, and make a specialty of long and difficult shipments. I endeavor to keep a large supply of queens on hand. Prices as follows:

Untested—1, 60c; 6, \$3.25; 12, \$6.00. Select Untested—1, 75c; 6, \$4.25; 12, \$8.00. Tested—1, \$1.25; 6, \$5.50; 12, \$12.00. Select Tested—1, \$1.50; 6, \$8.00; 12, \$15.00. Two-comb Nuclei with laying queens, \$3.00 each; 3-comb Nuclei with laying queens, \$3.50 each. Discounts on large orders.

**L. E. ALTWEIN, St. Joseph, Mo.**  
Please mention Am. Bee Journal when writing.

## Queens! Queens!

200 to 300 per month. Virgin, 75c; Untested, \$1.00; Tested, \$1.25; Select Tested, \$2.00; and Breeders, \$3.00. Nuclei, Full Colonies, Bees by the Pound. Have letter from State certifying my bees are free from foul brood.

**FRANK M. KEITH,** 4Atf  
83½ Florence St., Worcester, Mass.  
Please mention Am. Bee Journal when writing.

# DITTMER PROCESS COMB FOUNDATION

Has a special department for working wax into Foundation for the bee-keeper.

A Postal will bring you full information telling why DITTMER'S WAY is cheaper than selling your Wax and then buying your Foundation.

Remember we give a very reasonable Discount for early fall orders.

All Other Bee-Keepers' Supplies Always in Stock.

**Gus Dittmer Company, - Augusta, Wisconsin.**

## HAND-MADE SMOKERS

Extracts from Catalogs—1907:

Chas. Dadant & Son, Hamilton, Ill.—This is the Smoker we recommend above all others.

U. B. Lewis Co., Watertown, Wis.—We have sold these Smokers for a good many years and never received a single complaint.

A. I. Root Co., Medina, Ohio.—The cone fits inside of the cup so that the liquid creosote runs down inside of the smoker.

All Bingham Smokers are stamped on the tin, "Patented 1878, 1892, and 1903," and have all the new improvements.

Smoke Engine—largest smoker made.....\$1.50—4 inch stove

Doctor—cheapest made to use.....1.10—3 " "

Conqueror—right for most apiaries.....1.00—3 " "

Large—lasts longer than any other......90—2 " "

Little Wonder—as its name implies......65—2 " "

The above prices deliver Smoker at your post-office free. We send circular if requested. Original Bingham & Hetherington Uncapping-Knife.

**T. F. BINGHAM, Alma, Mich.**

Patented, May 20, 1879. BEST ON EARTH.

## THE FAMOUS Texas Queens!



Will be ready about March 1st. My

### Famous Banats

are unexcelled for Gentleness, Honey-Gathering, Prolificness, and as Early Breeders.

I also have the well-known

### 3-Banded Italians

carefully selected and bred for Business. All Queens guaranteed Pure and Free from Disease. Prices:

Untested—each, 75 cts.; per dozen, \$8.00  
Tested—each, \$1.25; per dozen, \$12.00

If you wish to swell your means, Just try my Famous Texas Queens

**GRANT ANDERSON,**  
2Atf San Benito, Texas.

## The Campbell System

**INSURES** your crop against DROUTH. Our experience in 1910 and 1911 has proved that good crops can be grown with less than eighteen inches of rainfall. Those who followed the **Campbell System** in 1910 had a crop in 1911.

### Don't Take Any Risks for 1912

Campbell's publications explain the system.

Campbell's Scientific Farmer	-	\$1.00
Campbell's Soil Culture Manual	-	\$2.50
Combination Price	-	\$3.00

Address,  
**Campbell's Soil Culture Co., Lincoln, Neb.**

When you write ask about the **Campbell Correspondence School.** 8Atf  
Please mention Am. Bee Journal when writing.

BACK VOLUMES OF AM. BEE JOURNAL.—We have some on hand, and would be glad to correspond with any one who may desire to complete a full set. It may be we can help do it. Address, American Bee Journal, 117 N. Jefferson St., Chicago, Ill.

# American Bee Journal

## Section - Honey Extractor.

Five or 6 years ago I had some 50 or 60 supers of unfinished sections on hand in the fall. I tried to extract them in a frame in a regular extractor, but the sections became more or less muddled up, so I constructed a little extractor with baskets, and to my surprise I was able to clean the sections of honey and use them the next season. Besides, I had extracted about 10 to 12 gallons of honey every night after supper, with my little boy helping me. It convinced me that a device of this kind would be profitable and useful for all comb-honey bee-keepers who might want some extracted honey, besides cleaning up unfinished sections. I now have gotten up a few of these honey-extractors with the reversible baskets, which work even neater than the first one, but it costs a little more. It can be used for all standard sizes of sections, from 4¼x4¼ to 4x5 or 3½x5 inches. The picture herewith shows the extractor Can, the section baskets, and also the gearing, the latter being lifted out of the can for the purpose of showing in the picture. It is all made of metal, very strong and durable.

I can furnish this extractor at the following prices: For the reversible style, \$4.50; the non-reversible, at \$3.00. These prices are for the extractor boxed, and f. o. b. Chicago. As the weight is only about 10 lbs., it would better be shipped by express.

### Section Uncapping-Knife, 50c

Address all orders to,

**A. H. OPFER, 117 North Jefferson St., Chicago, Ill.**

## A Few Dollars Invested on Easy Terms in a Twin Falls, Idaho, Orchard will insure An Income For Life

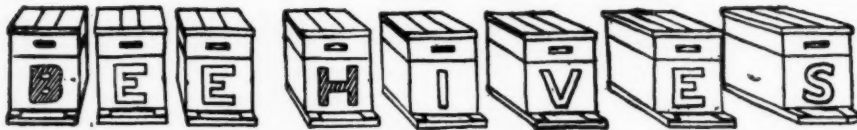
sufficient to keep a family in comfort. It will pay for a home that is not an expense, but

### A Source of REVENUE

Or, for an investment which will pay from 100% to 500% every year as long as you live, and longer, after it comes into bearing.

By calling at our office, or writing us, you can obtain full information.

**Twin Falls Co-operative Orchard Co.**  
881 Stock Exchange Bldg., Chicago, Ill.



Are our Specialty. Winter your bees in **Protection Hives**. Liberal early-order discounts.

**A. G. Woodman Co., Grand Rapids, Mich.**

## STANLEY is to the Front with BEES and QUEENS

**32 Years a Queen-Breeder. My Specialty is Choice Breeding Queens.**

Choice Breeding Queens, Golden, each, \$3.00; 3-Banded Italians, \$2.00.  
Golden and 3-Banded Tested, each, \$1.25; dozen, \$10.00.  
Carniolan, Caucasian, and Banats, each, \$1.25; dozen, \$10.00.  
Warranted Queens of the above Races, each, 75 cts.; dozen, \$7.00.  
Virgin Queens of the above Strains, 25 cts. each.

These Queens are sent in a Stanley Improved Introducing Cage. These Cages are well worth what I ask for Queen and Cage.

**Arthur Stanley, Dixon, Lee Co., Ill.**

## Wanted

## WHITE HONEY

Both COMB and EXTRACTED

Write us before disposing  
of your Honey Crop.

## Beeswax

—WANTED—

**HILDRETH & SEGELKEN,**  
265-267 Greenwich St.,  
NEW YORK, N. Y.

## Idaho Honey-Producers' Association,

IDAHO FALLS—IDAHO

Water-White Sweet Clover

## HONEY

Comb or Extracted

BY THE

## Can or Train-Load

For Prices, address 8A3

**H. A. Anderson, Sec'y,**  
At the Rigby, Idaho, Office.

Please mention Am. Bee Journal when writing.

## Honey and Beeswax

When Consigning, Buying,  
or Selling—Consult

### R. A. BURNETT & CO.

199 S. Water St., CHICAGO, Ill.

Please mention Am. Bee Journal when writing.

## Large Quantities of Both COMB and EXTRACTED HONEY WANTED

Write us for Price, stating Quantity and  
Grade.

**American Butter & Cheese Co.,**

612-14 Broadway, CLEVELAND, OHIO.

**CORN HARVESTER** with Binder Attachment cuts and throws in piles on harvester or winrow. Man and horse cuts and shocks equal with a corn Binder. Sold in every state. Price \$20 with Binder Attachment. S. C. MONTGOMERY, of Texline, Tex., writes:—"The harvester has proven all you claim for it. With the assistance of one man cut and bound over 100 acres of Corn, Kaffir Corn and Maize last year." Testimonials and catalog free, showing pictures of harvester. New Process Mfg. Co., Salina, Kan.



# HONEY AND BEESWAX

CHICAGO, Aug. 28.—There is not an active market; dealers consider prices high, while producers believe that the crop is a light one, and are holding back. California, however, has lowered the prices on practically all kinds, and some sales are reported. Fancy comb honey sells at 18c, with from 10c less on the descending grades. Extracted, white, 80c; amber, 70c. Beeswax 31c. Stocks are small in volume, and so far have sold soon after arrival.

R. A. BURNETT & Co.

CINCINNATI, Aug. 28.—We have had our first car of comb honey to arrive, which is selling at 16c per lb. f. o. b. Cincinnati, for No. 1 white. There is no demand for off grades. We are selling white extracted at 10c per lb., and amber in barrels at 7c. Beeswax is in fair demand at 33c per 100 pounds.

The above are our selling prices, not what we are paying.

C. H. W. WEBER & Co.

NEW YORK, Aug. 28.—Up to date we have not received any shipments of the new crop of comb honey from New York State or near by, to amount to anything, but expect to have larger shipments during the next two weeks. While there are no prices established as yet, No. 1 and Fancy White will sell at from 15c to 16c per pound; No. 2 white at around 13c. As to Buckwheat, it is too early to say how the crop has turned out; besides, quite a little is carried over from last season, which is almost unsalable at any fair value. Extracted honey is in good demand. Quite large shipments are arriving from the West Indies, principally from Porto Rico, and selling at from 75c to 85c per gallon, according to quality. California

white sage is selling at from 90c to 1c per lb., and water-white at from 10c to 10½c. Southern sells at from 65c to 85c per gallon, according to quality. Beeswax quiet at from 20c to 30c per pound.

HILDRETH & SEGELKEN.

DENVER, Aug. 29.—Owing to the continued hot weather, the local trade in honey is light, but the demand for car-lots is good. We quote our local market as follows: No. 1 white, per case of 24 sections, \$3.35; No. 1 light amber, \$3.15; No. 2, \$2.95. White extracted, 8½c; light amber, 7½c to 8½c. We pay 25c cash, or 27c in trade, for clean yellow beeswax delivered here.

THE COLO. HONEY-PRODUCERS' ASS'N.  
F. Rauchfuss, Mgr.

KANSAS CITY, MO., Aug. 28.—We are now receiving shipments of new honey, both comb and extracted. The demand is light on account of being little early. We quote: No. 1 white comb, 24-sections per case, \$3.50; No. 2, \$3.25; No. 1 amber, \$3.25; No. 2, \$2.75 to \$3.00. Extracted, white, per lb., 9c; amber, 7½c to 8c. Beeswax, 25c to 30c.

C. C. CLEMENS PRODUCE CO.

BOSTON, Aug. 28.—Fancy and No. 1 white comb honey, 17c to 18c; light color, 15c to 16c. White extracted, 11c; light color, 10c. Beeswax, 30c.

BLAKE-LEE CO.

CINCINNATI, Aug. 28.—New honey is coming in quite lively at the present time, and for strictly choice comb honey, we are getting from 15c to 16c a pound by the case from the store here. Strictly fancy extracted honey for table use, from 8c to 9c in boxes of two 60-lb. cans; amber honey, in barrels, from 6c to 7c. The above are our selling prices;

we expect to buy at prices cheaper than the above. For choice bright yellow beeswax, we are paying from 28c to 30c a pound delivered here, according to the quality.

THE FRED W. MUTH CO.

INDIANAPOLIS, Aug. 26.—The demand for white clover comb honey exceeds the supply. Fancy white would sell for 18c readily. Extracted is more plentiful, and sells for 11c to 12c in 5-gallon cans. The pound jar which has always retailed for 20c is now a thing of the past, and the price is 25c. Producers are being paid about 9c for extracted honey, but no established prices on comb. Beeswax is in good demand, and producers are being paid 30c per pound.

WALTER S. POWDER.

**"Bee-Keeping by 20th Century Methods; or J. E. Hand's Method of Controlling Swarms,"** is the title of a new booklet just issued from the press of Gleanings in Bee Culture. While it is written particularly to describe Mr. Hand's methods of controlling swarms by means of his new patented bottom-board, the booklet contains a great deal of other valuable matter, among which is the following: The hive to adopt; re-queening; American foul brood; wintering bees; out-apiaries; feeding and feeders; section honey; pure comb honey; conveniences in the apiary; producing a fancy article of extracted honey; swarm prevention by re-queening; increasing colonies, etc. The price of this booklet is 50 cents postpaid, but we club it with the American Bee Journal for a year—both for \$1.30. Address all orders to the American Bee Journal, 117 North Jefferson St., Chicago, Ill.

## HONEY

**We want to buy.**

We are always in the market for Honey, both Comb and Extracted, if quality and price justify. Should you have any to offer, let us hear from you. If Extracted, mail sample, and state how it is put up, and lowest price; if Comb, state what kind, and how packed.

**If in the market for Honey, write for prices.**

## HONEY

## HONEY

**We want to sell**

## CANS

## CANS

## CANS

We have a surplus of Second-Hand 5-Gallon Cans, two to a case, as good as New, used but once. Offer same, while they last, at 25c per case f. o. b. Cincinnati. Order quick, if you want any.

**C. H. W. Weber & Co., 2146 Central Ave., Cincinnati, Ohio.**

## A BUILDING FOR YOU, BY YOU!

You are respectfully and earnestly requested to contribute to the cost and construction of this building—it and its surroundings known as Arcadia—the Home of The Agassiz Association. The editor of this magazine believes in the worthiness of this Cause, and has contributed this space wherein this appeal may be made to you. You also are in sympathy with it because you love nature, the great outdoors, recreation, inspiration, health, happiness and humanity.

The Aassiz Association established in 1892 (Massachusetts), and in 1910 (Connecticut), is world-wide in its work. It was recently made homeless by a wealthy man who owned the property it occupied which had been promised permanently. He claimed his sole reason was out of friendship to the manager who was making too great personal sacrifice in behalf of humanity, and because he and his family were working without money remuneration. It is an interesting and surprising story. We will tell it to you, if you will let us. The Charter of the AA says:

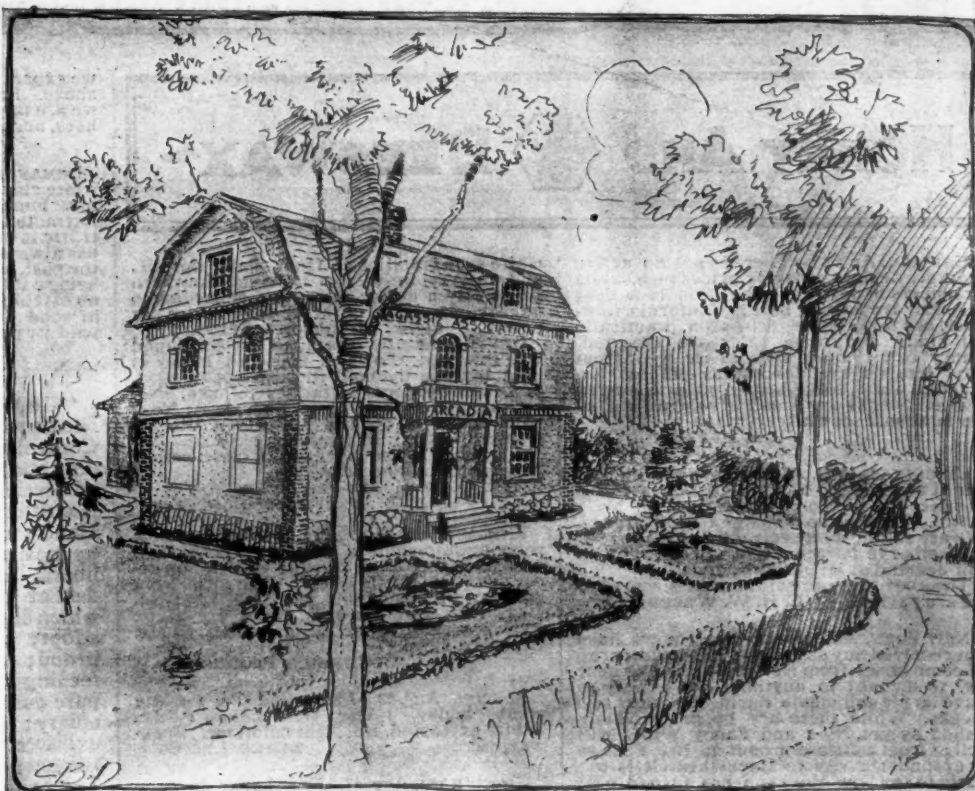
"The purposes for which said corporation is formed are the following, to-wit: the promotion of scientific education; the advancement of science; the collection in museums of natural and scientific specimens; the employment of observers and teachers in the different departments of science, and the general diffusion of knowledge."

We believe in those purposes. That is why we ask your aid and wish to be of service to you. No officer of the Association has or will receive a salary. Its altruism in all its purposes and the height of its ideals are excelled by no other organization.

The full story is told in a beautifully illustrated magazine, "The Guide to Nature," its official organ. A copy will be mailed free to you upon request. Contributors of less than ten dollars will receive the magazine the number of years there are dollars in their contributions. Contributors of ten dollars or more are entered as Life Subscribers—as long as they and the magazine are in existence.

Please write for further particulars.

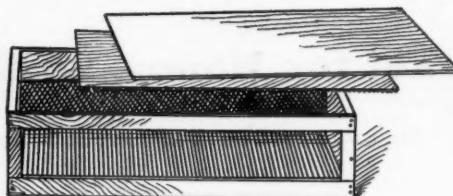
**The Agassiz Association, Arcadia, Sound Beach, Conn.** Edward F. Bigelow, President, and Man'g. Ed. "Guide to Nature."



# 1912 "falcon" BEE - SUPPLIES

6 Percent September-October Discount

The fall and early winter months constitute the dull season for selling bee-keepers' supplies. During these same months, after the honey-crop is gathered, the bee-keeper has the most leisure time. To induce bee-keepers to send in these early orders we offer a six percent discount during September and October. As the money is invested not to exceed six months earlier than the supplies must needs be purchased, the interest earned is at the rate of twelve percent, a fine profit in itself. In addition the rush is avoided and the possibility of a delayed shipment and consequent loss in swarms and honey forestalled. How many bee-keepers have lost more honey than the total value of their supplies, just on account of not having them ordered in time? Hives and supplies purchased now can be put together rainy days and idle times cheaper and better than under the excitement of swarming-time.



Corrugated-Lined Shipping-Cases.

### Prices

"falcon" CASES with extra sheets of corrugated paper and corrugated follower cost no more than Cases without these sold by others.

#### 24-lb. for Beeway Sections

##### Showing Four

This case is 11 $\frac{3}{4}$  inches wide, holds 24 sections 4 $\frac{1}{2}$ x1 $\frac{1}{2}$  to 1 $\frac{1}{4}$  or 20 sections, 2 or 1 15-16.  
No. 11 with 3-inch glass, 10, \$1.30 100, \$18.00  
No. 11 with 2-inch glass, 10, \$1.00 100, \$17.00  
No. 1 without glass, 10, \$1.80 100, \$16.00

#### 12-lb. for Beeway Sections

##### Showing Three

Holds 12 sections 4 $\frac{1}{2}$ x1 $\frac{1}{2}$ . A convenient standard size.

No. 13 with 3-inch glass, 10, \$1.30 100, \$11.50  
No. 13 with 2-inch glass, 10, \$1.25 100, \$10.75  
No. 3 without glass, 10, \$1.20 100, \$10.00

#### 24-lb. for Plain Sections

##### Showing Four

Holds 24 sections, 4 $\frac{1}{2}$ x1 $\frac{1}{2}$ .

No. 11 $\frac{1}{2}$  with 3-inch glass, 10, \$2.00 100, \$17.00  
No. 11 $\frac{1}{2}$  with 2-inch glass, 10, \$1.90 100, \$16.00  
No. 1 $\frac{1}{2}$  without glass, 10, \$1.70 100, \$15.00

#### 24-lb. for Ideal Sections

##### Showing Four

Holds 24 sections 3 $\frac{3}{4}$ x5x1 $\frac{1}{2}$ .

No. 16 with 3-inch glass, 10, \$1.80 100, \$16.00  
No. 6 without glass, 10, \$1.60 100, \$14.00

#### 24-lb. for Tall Sections

##### Showing Four

For 24 sections 4x5x1 $\frac{1}{2}$ .

No. 18 with 3-inch glass, 10, \$1.80 100, \$16.50  
No. 8 without glass, 10, \$1.60 100, \$14.50

Send a Full List of 1912 Wants Immediately and Get Quotations

**W. T. Falconer Mfg. Co.**

**C. C. Clemons Bee-Supply Co.**

**117 N. Jefferson St., CHICAGO, ILL. 130 Grand Avenue, KANSAS CITY, MO.**



